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For Manpower Planners
Fiscal Year 1984

New York State

STATE OF NEW YORK Mario M. Cuomo, Governor

DEPARTMENT OF LABOR Lillian Roberts, Commissioner

New York State Department of Labor
Division of Research and Statistics
Louis W. Schisa, Director

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INTRODUCTION

This Annual Planning Information (API) report was designed for employment and training program administrators and planners, and others concerned with the state's economic condition and labor market. Data obtained from the New York State Department of Labor, U.S. Bureau of the Census, and other state and federal agencies are included. Various sections of the API deal with the state's population, labor force, employment and unemployment, and occupational supply and demand.

The report is intended to be a source document for planners; it presents and interprets data but does not apply the data to specific planning situations.

For further information, contact:

State Analysis Unit
Building #12, Room 405
State Office Building Campus
Albany, New York 12240

Telephone: (518) 457-3800

HIGHLIGHTS

According to the U.S. Census Bureau, New York was one of only two states in the country to experience a drop in population from 1970 to 1980. Outmigration from metropolitan areas--particularly central cities--caused an overall reduction of 683,000. Losses in the white population more than offset growth in the black and other nonwhite groups. Despite the decline in the total, there was an increase in residents aged 16 and over. By July 1. 1982, New York's population was estimated at 17,659,000, or 101,000 greater than the number enumerated in 1980.

The state's labor force expanded to a new record annual average of 8,026,000 in 1982, with an over-the-year decrease in employment and an increase in unemployment. Although the unemployment rate rose a full percentage point to 8.6, this was the first year since 1970 that the statewide jobless rate was less than the U.S. rate.

The national recession began to affect the New York State job picture in 1982. Nonagricultural wage and salary jobs dropped to an average of 7,234,100, down 53,200 from the all-time high recorded in 1981. The 1981-1982 downturn was the first since 1976, also a recession-influenced year. The long-run shift of jobs from the manufacturing industries to the nonfactory component continued during 1982, as manufacturing employment declined to its lowest level since 1939. The service industry, the state's largest employer, proved resistant to the current economic slump and continued to hire workers, as did finance, insurance, and real estate; and construction. Trade, the second largest employer in the state; government; and transportation and public utilities all lost jobs over the year. From 1981 to 1982, the state's Index of Business Activity was unchanged at 117.

The average length of the workweek for manufacturing production workers in New York State declined slightly to 38.8 hours in 1982. Gains in average weekly earnings of factory production workers failed to keep pace with the rate of inflation from 1981 to 1982.

Youths between the ages of 16 and 24 years comprised 40.5 percent of the state's unemployed in 1982; women made up 43.7 percent. Blacks accounted for one-fifth of the unemployed in 1982, compared with one-quarter in 1981. Persons of Hispanic origin made up 11.5 percent. Among unemployment insurance beneficiaries, 57.8 percent were formerly blue-collar workers. Over half indicated nonmanufacturing as their industry of last employment.

Projections to 1985 indicate that major job gains will occur in the state's clerical, professional and technical, and service occupations--continuing a long-run trend away from blue-collar jobs. More than 334,000 job openings due to growth or replacement needs (such as death and retirement) and about 430,000 job openings due to geographic and occupational transfers are expected annually through 1985.

Population Trends Since 1970

According to a final count of the 1980 Census, the population of New York State was 17,558,072 on April 1, 1980, a decrease of 3.7 percent from the 18,241,391 inhabitants enumerated in 1970. During the same period, the population of the United States increased 11.4 percent, and the population of other states in the Northeast inched upward. New York's population decline was much greater than that of Rhode Island, the only other state in the country to experience a drop. The Western and Southern regions of the U.S. registered the largest gains over the decade.

As shown in Table 1, the decline of the state's population from 1970 to 1980 was not evenly distributed among areas. Coupled with outmigration from the state as a whole, the long-term trend of migration from central cities continued. The most severe reductions were centered in New York City (-824,000), the Buffalo Standard Metropolitan Statistical Area (-106,400), and Nassau County (-107,300).

Table 1. TOTAL POPULATION AND PERCENT CHANGE
NEW YORK STATE AND SELECTED AREAS
1970 AND 1980

(In thousands)

Area	1970	1980	Change 1970-1980	
			Number (000's)	Percent
New York State	18,241.4	17,558.1	-683.3	-3.7
Albany-Schenectady-Troy SMSA	778.0	795.0	+17.0	+2.2
Binghamton SMSA (New York portion)	268.3	263.5	-4.8	-1.8
Buffalo SMSA	1,349.2	1,242.8	-106.4	-7.9
Elmira SMSA	101.5	97.7	-3.8	-3.7
Glens Falls SMSA	102.1	109.6	+7.5	+7.3
Nassau-Suffolk SMSA	2,555.9	2,605.8	+49.9	+2.0
Newburgh-Middletown SMSA	221.7	259.6	+37.9	+17.1
New York SMSA (8-county)	9,076.6	8,275.0	-801.6	-8.8
New York City	7,895.6	7,071.6	-824.0	-10.4
Poughkeepsie SMSA	222.3	245.1	+22.8	+10.3
Rochester SMSA	961.5	971.2	+9.7	+1.0
Syracuse SMSA	636.6	643.0	+6.4	+1.0
Utica-Rome SMSA	340.5	320.2	-20.3	-6.0
Metropolitan	16,614.2	15,828.5	-785.7	-4.7
Nonmetropolitan	1,627.2	1,729.6	+102.4	+6.3

SOURCE: 1980 Census of Population and 1970 Census of Population.

Population in nonmetropolitan areas as a whole grew by 6.3 percent (102,400) over the ten years, while major cities consistently incurred losses. The City of Buffalo lost almost one-quarter of its population. Two other large cities in the western part of the state, Rochester and Niagara Falls, lost 16.1 and 16.6 percent of their populations. Even in the Newburgh-Middletown SMSA, one of the highest growth areas in the state (+17.1 percent), the central cities experienced declines. Newburgh declined by 10.6 percent and Middletown by 5.1 percent. In some cases, the gains registered in areas outside of the central cities more than offset losses in the major cities, resulting in increases in population for several SMSA's. The most significant growth occurred in Suffolk (+157,200), Richmond (+56,700), Orange (+37,900), Saratoga (+32,000), Rockland (+29,600), Dutchess (+22,800), and Putnam (+20,500) counties.

Population counts for counties in 1960, 1970, and 1980 are shown in Appendix Table A-1.

The most recent data available on the components of population change indicate that outmigration was mainly responsible for the drop of 683,300 in New York State residents between 1970 and 1980. Births outnumbered deaths by 688,000 during the seventies, but this gain was outweighed by a total net outmigration of 1,371,300 persons. Outmigration was predominantly a metropolitan phenomenon, concentrated in the downstate area. Nonmetropolitan areas as a group experienced a net inmigration of 39,400 during the decade. The only metropolitan areas to experience net inmigration were the Poughkeepsie (+12,400), Newburgh-Middletown (+3,500), and Glens Falls (+2,900) SMSA's.

Table 2. COMPONENTS OF CHANGE OF THE POPULATION
NEW YORK STATE AND SELECTED AREAS
1970-1980

(In thousands)

Area	Total	Births	Deaths	Migration a/
New York State	-683.3	2,310.2	1,622.2	-1,371.3
Albany-Schenectady-Troy SMSA	+17.0	98.4	74.8	-6.6
Binghamton SMSA b/	-4.8	33.0	22.3	-15.5
Buffalo SMSA	-106.4	160.6	121.2	-145.8
Elmira SMSA	-3.8	13.2	9.3	-7.7
Glens Falls SMSA	+7.3	15.7	11.3	+2.9
Nassau-Suffolk SMSA	+49.9	289.9	185.0	-55.0
Newburgh-Middletown SMSA	+17.1	36.4	22.8	+3.5
New York SMSA (8-county)	-801.6	1,158.3	842.2	-1,117.7
Poughkeepsie SMSA	+22.8	26.9	16.5	+12.4
Rochester SMSA	+9.7	127.5	76.6	-41.2
Syracuse SMSA	+6.4	86.6	51.7	-28.5
Utica-Rome SMSA	-20.3	43.4	31.2	-32.5
Metropolitan	-785.7	2,089.9	1,464.9	-1,410.7
Nonmetropolitan	+102.4	220.3	157.3	+39.4

a. Migration is the residual of total change plus the net change of births minus deaths.

b. Broome and Tioga counties only (New York portion).

SOURCE: Total population change is from 1980 Census of Population and 1970 Census of Population. Births and deaths are from New York State Department of Health.

The number of persons less than 16 years of age fell sharply (-22.6 percent) from 1970 to 1980, due mainly to the aging of the post-World War II "baby boom" generation. In 1970, the age of this group ranged from 8 to 24 years; by 1980 these individuals ranged in age from 18 to 34 years. The decline in the population of persons less than 16 years of age was almost equally divided between males and females.

The number of persons 16 to 21 years of age expanded by almost 7 percent from 1970 to 1980. The increase was much more substantial for males (+10.3 percent) than for females (+3.7 percent). Part of the disparity reflects a deflated 1970 count of males in this age group resulting from the influx of young men into the military during the Vietnam Conflict (military personnel stationed overseas are not included in population counts of states).

More than 43 percent of New York State's population was between 16 and 44 years of age in 1980, up 8.8 percent from 1970, while the number of persons 30 to 34 years of age increased by 29.9 percent over the 10-year period. In 1970, females accounted for 52.2 percent of persons 16 to 44 years of age, by 1980 the proportion had dropped to 51.6 percent.

The population group aged 45 to 64 incurred a loss from 1970 to 1980. The proportion of males fell at a slightly higher rate (-8.0 percent) than the proportion of females (-7.4 percent). Females made up 53.3 percent of this age group in 1980.

The number of persons aged 65 and over rose by 9.9 percent over the period, with females (+14.1 percent) growing at a faster rate than males (+3.8 percent).

The total number of working-age persons (aged 16 and over) enumerated in the 1980 Census was 13,515,433, an increase of 3.8 percent from 1970. Growth rates were very similar for males and females. By comparison, the estimated annual average civilian noninstitutional population from the Current Population Survey increased by 4.1 percent from 1970 to 1980.

The general aging of the population, more specifically of the "baby boom" generation, caused the median age in New York State to rise to 31.9 years in 1980 from 30.3 years in 1970.

Various racial groups also experienced major differences in population changes. The white population was the only group to decline numerically from 1970 to 1980: the total was down almost 1.9 million or 11.8 percent. Almost all of the drop occurred in New York City (1.8 million) which lost almost 30 percent of its white population. The black population underwent the largest absolute increase (+233,057) of the racial groups; almost 50 percent of this was in New York City. The Korean population experienced a jump of 417.0 percent, the largest percentage change of any group.

Table 3. POPULATION AND PERCENT CHANGE
BY AGE, NEW YORK STATE
1970 and 1980

Age group	1970		1980		Percent change 1970-1980
	Number	Percent of total	Number	Percent of total	
All ages	18,241,391	100.0	17,558,072	100.0	-3.7
Under 5 years	1,486,191	8.1	1,135,925	6.5	-23.6
5 to 9 years	1,681,149	9.2	1,184,879	6.7	-29.5
10 to 14 years	1,722,183	9.4	1,406,060	8.0	-18.4
15 to 19 years	1,575,724	8.6	1,598,571	9.1	+1.4
20 to 24 years	1,352,998	7.4	1,519,946	8.7	+12.3
25 to 29 years	1,213,620	6.7	1,428,376	8.1	+17.7
30 to 34 years	1,041,029	5.7	1,351,839	7.7	+29.9
35 to 44 years	2,158,758	11.8	2,043,219	11.6	-5.4
45 to 54 years	2,196,128	12.0	1,908,113	10.9	-13.1
55 to 59 years	979,749	5.4	979,370	5.6	0.0
60 to 64 years	862,560	4.7	841,007	4.8	-2.5
65 to 74 years	1,243,104	6.8	1,292,428	7.4	+4.0
75 to 84 years	586,620	3.2	675,356	3.8	+15.1
85 years and over	137,069	0.8	192,983	1.1	+40.8
16 years and over	13,017,100	71.4	13,515,433	77.0	+3.8
Median age	30.3	na	31.9	na	+5.3

na = not applicable.
SOURCE: 1980 Census of Population and 1970 Census of Population.

Table 4. POPULATION AND PERCENT CHANGE BY RACE
SELECTED GROUPS
NEW YORK STATE
1970 AND 1980

Race	1970	1980	Change 1970-1980	
			Number	Percent
White	15,834,090	13,960,868	-1,873,222	-11.8
Black	2,168,949	2,402,006	+233,057	+10.7
Chinese	81,378	148,105	+66,727	+82.0
American Indian	28,355	38,967	+10,612	+37.4
Korean	6,607	34,157	+27,550	+417.0
Filipino	14,279	33,956	+19,677	+137.8
Japanese	20,351	24,524	+4,173	+20.5
Hawaiian	1,194	1,566	+372	+31.2
Other	81,764	913,923	a/	a/

a. In 1980, many residents of Spanish origin indicated their race as "other" rather than as "white" or "black." Therefore comparison of "other" races in 1980 with 1970 does not lead to an accurate analysis.
SOURCES: 1980 Census of Population and 1970 Census of Population.

New York State's Spanish origin population rose by 22.7 percent from 1970 to 1,659,300 in 1980. Persons of Spanish origin comprised 9.5 percent of the state's total population in 1980, compared with 7.4 percent in 1970.

Almost 85 percent of the state's 1980 Spanish origin population resided in New York City, where they comprised 19.9 percent of the city's total population.

Table 5. SPANISH ORIGIN POPULATION
NEW YORK STATE AND SELECTED AREAS
1980

Area	Number	Percent of state total
New York State	1,659,300	100.0
Albany-Schenectady-Troy SMSA	8,146	0.5
Binghamton SMSA a/	1,815	0.1
Buffalo SMSA	16,206	1.0
Glens Falls SMSA	963	0.1
Nassau-Suffolk SMSA	101,975	6.1
New York SMSA a/	1,464,634	88.3
New York City	1,406,024	84.7
Rochester SMSA	19,328	1.2
Syracuse SMSA	5,662	0.3
Utica-Rome SMSA	2,878	0.2

a. New York portion only.
SOURCE: 1980 Census of Population, Summary Tape File 1-A.

The majority (59.4 percent) of the Spanish origin population indicated Puerto Rican as their national heritage, compared with 4.6 percent Cuban and 2.3 percent Mexican. The "other" group accounted for 33.6 percent.

Almost half of the Spanish origin population described themselves as white, compared with 6.2 percent who indicated black. The "other races" group comprised 45.1 percent of the total Spanish origin population. However, many residents of Spanish origin indicated their race as "other" rather than white or black.

Table 6. SPANISH ORIGIN POPULATION
BY NATIONAL HERITAGE AND BY RACE
NEW YORK STATE
1980

Nationality/race	Number	Percent of total
Total Spanish origin	1,659,300	100.0
Cuban	76,942	4.6
Mexican	38,755	2.3
Puerto Rican	986,389	59.4
Other	557,214	33.6
White	796,134	48.0
Black	102,879	6.2
American Indian, Eskimo, Aleutian, Asian and Pacific Islander	11,699	0.7
Other races	748,588 a/	45.1

a. Many residents of Spanish origin indicated their race as "other" rather than as white or black.

SOURCE: 1980 Census of Population, Summary File Tape 1-A.

The Spanish origin population had a higher concentration of persons less than 18 years of age (36.0 percent) in 1980 than did the total population (26.7 percent). Most of the disparity in this age group was attributed to differences in the total white and white Spanish origin population groups. The proportion of people between 18 and 64 years of age was similar across all groups, differing by less than 2 percentage points. The percentage of persons 65 years of age and over was much higher for the total population than it was for the Spanish origin population: 12.3 versus 4.6 percent. This difference was again attributed to the disparity of the total white (13.9 percent) and white Spanish origin (5.8 percent) population groups.

Table 7. PERCENT DISTRIBUTION OF THE POPULATION
SELECTED AGE, RACE AND ETHNIC GROUPS
NEW YORK STATE
1980

Age	Total population			Spanish origin		
	Total	White	Black	Total	White	Black
All ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 5 years	6.5	5.8	8.5	10.2	9.6	10.1
5-17 years	20.2	19.0	25.0	25.8	25.0	24.9
18-64 years	61.0	61.3	59.7	59.4	59.5	60.0
65 years and over	12.3	13.9	6.8	4.6	5.8	5.0

SOURCE: 1980 Census of Population, Summary Tape File 1-A.

New York State's population 25 years of age and over became better educated from 1970 to 1980 as those who had completed four years of high school or more increased by almost 14 percentage points over the decade. Individuals with one to three years of college climbed from 9.6 percent of the total in 1970 to 14.3 percent in 1980, while the most significant growth occurred in the group who had completed four or more years of college--from 11.9 percent in 1970 to 17.9 percent in 1980 (see Table 8).

The educational attainment for persons 25 and over was not uniform by race and Spanish origin in 1980 (see Table 9). About seven out of 10 Asian and Pacific Islanders and whites had completed four years of high school or more while at the other extreme, only four in 10 persons of Spanish origin were in that category. The widest differences occurred in those completing four or more years of college.

Table 8. PERCENT DISTRIBUTION OF EDUCATIONAL ATTAINMENT
PERSONS 25 YEARS OF AGE AND OVER
NEW YORK STATE
1970 AND 1980

Educational attainment	1970	1980	Percentage point change 1970-1980
Total	100.0	100.0	-
Elementary school (0-8)	27.9	18.3	-9.6
High school			
1 to 3 years	19.4	15.4	-4.0
4 years	31.2	34.1	+2.9
College			
1 to 3 years	9.6	14.3	+4.7
4 or more years	11.9	17.9	+6.0

SOURCE: 1970 Census of Population and 1980 Census of of Population, Summary Tape File 3.

Table 9. PERCENT DISTRIBUTION OF EDUCATIONAL ATTAINMENT FOR PERSONS 25 AND OVER BY RACE AND SPANISH ORIGIN NEW YORK STATE 1980

Educational attainment	Total	White	Black	American Indian, Eskimo and Aleut.	Asian and Pacific Islanders	Spanish origin
Total	100.0	100.0	100.0	100.0	100.0	100.0
Elementary school (0-8)	18.3	16.9	20.5	22.8	21.3	38.3
High school						
1 to 3 years	15.4	14.4	21.9	21.5	8.4	19.7
4 years	34.1	34.9	34.1	31.6	18.5	24.9
College						
1 to 3 years	14.3	14.5	14.7	15.8	12.9	10.4
4 or more years	17.9	19.4	8.8	8.3	38.9	6.8

NOTE: Detail may not add to total due to rounding.
SOURCE: 1980 Census of Population, Summary Tape File 3.

According to the Census Bureau, there were 2,047,759 veterans living in New York State in 1980. The most common period of service was World War II, when 44.0 percent of New York's veterans served. Almost half-a-million New Yorkers served during the Vietnam Era, making up 21.9 percent of the total number of veterans in the state. Veterans of the Korean conflict comprised 16.9 percent of the total.

The number and percent distribution of New York State's veterans are presented in Table 10.

Table 10. VETERAN POPULATION AND PERCENT DISTRIBUTION BY SEX AND PERIOD OF SERVICE NEW YORK STATE 1980

Veteran group	Number	Percent distribution
Total veterans	2,047,759	100.0
Male	1,973,866	96.4
Female	73,893	3.6
Period of service		
May 1975 or later	54,470	2.7
Vietnam Era	448,084	21.9
Korean Conflict	346,650	16.9
World War II	900,077	44.0
World War I	38,305	1.9
Other	260,173	12.7

NOTE: Detail may not add to total due to rounding.
SOURCE: 1980 Census of Population, Summary Tape File 3.

Population Estimates: July 1981 and July 1982

The population of New York State increased by 40,000 or 0.2 percent from the 1980 Census figure to an estimated 17,598,000 on July 1, 1981, according to the U.S. Department of Commerce, Bureau of the Census. Estimated increases experienced by those under 5 years of age (+1.6 percent), 18 to 44 years (+2.2 percent) and persons 65 years and older (+1.2 percent), were tempered by declines in the number of persons 5 to 17 years of age (-3.5 percent) as well as those 45 to 64 years of age (-0.8 percent).

By July 1, 1982, New York's population was estimated at 17,659,000; 61,000 more than the previous year (0.3 percent) and 101,000 (0.6 percent) greater than the number enumerated in 1980. The gain of 101,000 from 1980 was the result of 544,000 births, 378,000 deaths and a net outmigration of 65,000.

The estimated population of the nation grew about four times as fast as New York State's since 1980, with the greatest gains centered in the Southern and Western regions.

Population Outlook

Preliminary projections of the New York State Commerce Department indicate that the state's population will grow by an estimated 3.8 percent from 1980 to 2010. The strongest gain will occur in the decade of the 1990's, when the population will increase by 1.8 percent.

During the 1980's, New York's total population will experience a gain of 1.2 percent. An expansion of 1.9 percent expected in the male population compares with an anticipated upturn of only 0.5 percent in the female population. This will not cause a significant change in the sex distribution; males will increase from 47.5 to 47.9 percent of the total.

Changes from 1980 to 1990 in the working age population will vary sharply across different age brackets. The number of persons aged 25 through 49 will experience a sizable increase of 17.8 percent, followed by a significant rise of 10.5 percent in those aged 65 and over. These changes will more than offset substantial reductions in those aged 15 through 24 and 50 through 64. The number of working-age youths (15 to 19 and to a lesser extent 20-24) will decline substantially during the 1980's. Another major group that will incur a population decline is the 45 to 64 year old age group (-5.6 percent).

Civilian Labor Force Trends Since 1970

New York State's civilian labor force--the number of persons 16 years of age and over currently working or actively seeking work--rose to a record 8,026,000 during 1982, up slightly from 8,023,000 in 1981. Since 1970, the size of New York's labor force failed to rise in only three years: 1972, 1973 and 1980.

The growth in the labor force from 1981 to 1982 was limited by a small reduction in New York State's labor force participation rate (LFPR)--defined as the percent of the civilian noninstitutional population in the civilian labor force. This was the third successive drop from the historical high of 60.3 in 1979 and was shared by all major demographic groups, with the exception of black and other males.

The shrinkage in the LFPR from 1981 to 1982 was eclipsed by an expansion of 0.8 percent in the civilian noninstitutional population aged 16 and over.

Table 11. CIVILIAN LABOR FORCE SUMMARY
NEW YORK STATE
1970-1982

(Annual averages, numbers in thousands)

Year	Labor force			Unemployment rate (percent)	
	Total	Employed	Unemployed	New York	United States
1970	7,427	7,097	331	4.5	4.9
1971	7,484	6,994	490	6.6	5.9
1972	7,479	6,980	500	6.7	5.6
1973	7,411	7,007	404	5.4	4.9
1974	7,535	7,054	481	6.4	5.6
1975	7,627	6,900	726	9.5	8.5
1976	7,676	6,888	788	10.3	7.7
1977	7,718	7,014	703	9.1	7.1
1978	7,829	7,227	602	7.7	6.1
1979	8,000	7,429	570	7.1	5.8
1980	7,972	7,375	597	7.5	7.1
1981	8,023	7,411	613	7.6	7.6
1982	8,026	7,339	687	8.6	9.7

From 1970 to 1982, New York State's labor force increased by 8.1 percent, compared with an expansion of 33.1 percent in the U.S. As a result, the New York State share of the U.S. labor force dwindled from 9.0 percent in 1970 to 7.3 percent in 1982. A disparity in the growth rates of the civilian noninstitutional population--5.6 percent in New York versus 25.7 percent in the nation and a widening difference between the respective LFPR's--2.5 percentage points in 1970 versus 4.6 percentage points in 1982--were causative factors in the reduction.

The labor force continued to move towards a higher concentration of "black and other" races in 1982. Ten years ago (1972), 11.9 percent of the statewide labor force was categorized as "black and other" races; this percentage increased to 12.8 percent in 1977 and was 15.1 percent by 1982. Growth of the "black and other" civilian noninstitutional population outpaced the change in the white civilian noninstitutional population over the period.

The drop in the participation rate from 1982 to 1982 was reflected in all groups except "black and other" males. Both white males and females incurred decreases in their LFPR's as the total white rate fell to 59.6 percent. The rate for white males, at 73.7 percent, in 1982 was the lowest in the 12-year series. The white female LFPR decline was the first since 1973. The participation rate for "black and other" females incurred the most significant drop--down from 51.4 in 1981 (a series high) to 50.0 in 1982. The ratio of women in New York State's labor force, however, remained at 43.2 percent in 1982. The decline in the participation rate of "black and other" females overshadowed the rise in that of "black and other" males--resulting in a decline in the LFPR for the total "black and other" group. White males were the only group in the U.S. experiencing a loss in their LFPR.

Table 12. CIVILIAN LABOR FORCE PARTICIPATION RATES BY SEX AND RACE
UNITED STATES AND NEW YORK STATE
1970-1982

Year	All workers		White total		White male		White female		Black and other--total		Black and other--male		Black and other--female	
	United States	New York State	United States	New York State	United States	New York State	United States	New York State	United States	New York State	United States	New York State	United States	New York State
1970	60.4	57.9	60.2	58.6	80.0	76.9	42.6	40.4	61.8	56.6	76.5	79.3	49.5	48.5
1971	60.2	57.8	60.1	57.5	79.6	76.8	42.6	40.5	60.9	60.7	74.9	76.5	49.2	48.6
1972	60.4	57.4	60.4	57.6	79.6	76.9	43.2	40.6	60.0	56.6	73.7	72.3	48.7	44.7
1973	60.8	56.8	60.9	57.1	79.5	76.3	44.1	40.3	60.3	55.3	73.8	70.5	49.1	43.2
1974	61.2	57.7	61.4	57.9	79.4	76.4	45.2	41.7	60.0	56.1	73.3	72.0	49.1	44.4
1975	61.2	58.0	61.5	58.4	78.7	76.6	45.9	42.6	59.3	55.5	71.5	69.4	49.2	45.5
1976	61.6	58.1	61.9	58.5	78.4	76.0	46.9	42.9	59.4	55.7	70.7	68.4	50.2	46.6
1977	62.3	58.3	62.6	58.6	78.5	75.4	48.1	43.8	60.0	56.6	71.0	69.5	50.9	47.3
1978	63.2	59.1	63.4	59.2	78.6	75.0	49.5	45.4	61.8	58.8	72.1	70.4	53.3	49.7
1979	63.7	60.3	64.0	60.5	78.6	75.7	50.6	47.1	61.8	59.5	71.9	71.1	53.5	50.9
1980	63.8	59.9	64.2	60.4	78.3	75.7	51.3	47.2	61.2	57.6	70.8	67.1	53.4	50.3
1981	63.9	59.8	64.3	60.1	77.9	74.4	51.9	47.6	61.3	58.6	70.6	67.8	53.6	51.4
1982	64.0	59.4	64.3	59.6	77.4	73.7	52.4	47.3	61.6	58.3	71.0	68.9	53.9	50.0

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey.

Resident employment in the state slid to an average of 7,339,000 in 1982, down 72,000 from 1981. This was the lowest level since 1978 when the count stood at 7,227,000. Decreases were widespread throughout the state, with the largest centered in New York City and the Buffalo SMSA. The Nassau-Suffolk SMSA posted the largest increase and some improvement was also recorded in the Poughkeepsie SMSA and several small upstate labor areas.

Joblessness turned upward for the third straight year and at 687,000 in 1982 was up 74,000 from 1981 but still below the record high of 788,000 in 1976. The unemployment rate jumped a full percentage point to 8.6 percent from year to year, the highest average since 1977.

Average unemployment increased in all major areas from 1981 to 1982, with the largest hikes centered in New York City and the Buffalo, Nassau-Suffolk and Rochester SMSA's. Nominal reductions occurred in the Kingston, Cobleskill, Monticello, and Port Henry labor areas.

Civilian Labor Force Outlook for Fiscal Year 1984

New York State's civilian labor force is expected to average 8,030,000 in Fiscal Year 1984, reflecting a slight upturn from Calendar Year 1982.

The growth in the size of the labor force is not expected to be evenly distributed among all geographic areas. The largest increase is expected in the Rochester SMSA (+6,800), with smaller uptrends in several other upstate SMSA's. Declines in labor force are expected in the New York City 8-county area (with both the central city and suburban counties contributing to the loss), and the Nassau-Suffolk, Syracuse, Poughkeepsie, and Elmira SMSA's.

Trends from 1972-1982

The persistent national recession which started in mid-1981 began to affect the New York State job scene in early 1982 and the situation worsened throughout the year. Nonfarm wage and salary jobs retrenched to an average of 7,234,100, off 53,200 from the all-time high recorded in 1981. Although the annual average drop amounted to only 0.7 percent, the count during the final quarter of the year was down 93,000 or 1.3 percent from the comparable 1981 level. The 1981-1982 downturn was the first since 1976, also a recession-influenced year.

The long-run shift of jobs from goods-producing firms to the nonfactory component continued during 1982 as the national slump hit the state's factory sector. Manufacturing employment retrenched to 1,361,800, off 71,500 from 1981, and stood at the lowest level recorded since 1939. Once the state's largest employer, manufacturing slipped behind services in 1975 and fell to third after trade in 1980.

Service industries have grown each year since 1972, except for 1975 when the recession robbed this industry of 5,200 jobs. During the current economic downturn, however, the state's largest employer has thus far proved resistant to adverse business conditions and continued to hire workers. In 1982, service jobs numbered 1,815,800, up 32,000 from 1981, and 411,800 (+29.3 percent) higher than 1972. Service accounted for one out of every five nonfarm jobs in 1972 and by 1982 the average was one out of four.

In spite of reduced staffing over the last three years, the trade industry remains the state's second largest employer. In 1982, trade stood at 1,454,300, only 9,300, or 0.6 percent, higher than the 1972 total. Over the 10-year period, wholesale trade employment rose by a mere 800, or 0.2 percent, while retail trade gained 8,300 or 0.8 percent.

The government sector climbed steadily to an all-time record high in 1975 but never fully recovered from reductions in 1976 and 1977. Federal employment, except for the hiring of temporary Census enumerators in 1970 and 1980, has been on a fairly steady downtrend since 1967. The local segment has deteriorated since 1978 and by 1982 was more than 50,000 lower than the 1975 peak. Jobs at the state level picked up substantially since the 1976 furloughing and reached a new high in 1982.

After declining from 1973 through 1976, the finance, insurance and real estate industry accelerated through 1982 with the bulk of the hiring concentrated in New York City. The count of workers was 670,500 in 1982, a gain of 15,600 (2.4 percent) from 1981, and a jump of 79,200 (13.4 percent) from 1972.

Since 1972, the transportation and public utilities industry has seen only three years of growth, 1972, 1978 and 1979. In 1982, the job total was 421,900, or 50,900 lower (-10.8 percent) than the 1972 figure of 472,800.

The state's construction industry suffered substantial cutbacks during the recessionary period of 1974 through 1976. Despite some subsequent increases, 1982 employment was considerably below the 1973 total of 283,000 jobs, the high for this series.

Table 13 shows employment by major industry division in New York State for the period 1972 through 1982.

Table 13. NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT IN NEW YORK STATE, 1972-1982

(Annual averages in thousands)

Industry	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Total	7,038.5	7,132.6	7,077.1	6,829.9	6,789.5	6,857.6	7,044.5	7,179.4	7,207.1	7,287.3	7,234.1
Manufacturing	1,602.2	1,619.1	1,574.6	1,421.9	1,438.9	1,459.6	1,481.2	1,492.8	1,445.1	1,433.3	1,361.8
Durable	750.3	784.6	788.3	701.9	707.2	722.6	745.3	767.6	744.6	741.9	701.2
Nondurable	852.0	834.4	786.3	719.9	731.7	737.0	736.0	725.3	700.5	691.4	660.6
Nonmanufacturing	5,436.3	5,513.1	5,502.3	5,408.1	5,350.6	5,398.0	5,563.3	5,686.6	5,762.0	5,854.0	5,872.3
Construction	272.3	283.0	261.2	211.7	189.4	190.2	199.2	210.3	209.3	213.2	213.8
Transportation and public utilities	472.8	470.2	456.8	434.0	428.1	425.3	430.3	433.8	431.4	429.7	421.9
Trade	1,445.0	1,459.7	1,441.7	1,402.3	1,414.4	1,427.6	1,454.7	1,476.8	1,465.2	1,465.7	1,454.3
Finance, insurance and real estate	591.3	586.3	581.7	577.3	575.3	577.8	586.9	605.4	626.2	654.9	670.5
Services	1,404.0	1,438.0	1,451.9	1,446.7	1,462.7	1,499.5	1,570.8	1,643.2	1,709.4	1,783.8	1,815.8
Mining	7.0	7.2	7.4	7.4	7.1	6.9	6.3	5.9	6.1	6.4	6.4
Government	1,243.9	1,268.6	1,301.9	1,328.7	1,273.6	1,270.8	1,315.1	1,311.3	1,314.4	1,300.3	1,289.7

NOTE: Detail may not add to total due to rounding.

Industry Employment Developments: 1981-1982

During three recessions--beginning in 1960, 1969 and 1973--New York lagged the rest of the country in job cutbacks and subsequently was slower in recovery. The state's employers resisted this trend during the short-lived 1980 slump but the more persistent national slowdown beginning in mid-1981 forced statewide layoffs in early 1982 which continued throughout the year. Annual average employment for 1982 was off 53,200 from the 1981 record.

Manufacturing. Jobs in manufacturing slid to 1,361,800 in 1982, the lowest level recorded since 1939 when employment stood at 1,356,300. Furloughing in both durable and nondurable goods industries forced the 5.0 percent drop in jobs from 1981 to 1982. Manufacturing employment fell 6.6 percent nationwide during the year and, like the state, this marked the third straight year of contractions.

Durable goods manufacturing. Employers in the durable goods segment trimmed payrolls to 701,200 in 1982, 40,700 or 5.5 percent lower than in 1981. Although furloughing was widespread and severe, cuts in some industries were relatively less consequential than in the rest of the U.S. The 1982 level was the lowest since 1949, when jobs stood at 668,400.

All major components except instruments shared in the downturn as employers were faced with high interest rates, increased competition and slackened demand for autos, machinery and related products. The biggest losers were primary metals and nonelectrical machinery with smaller cuts concentrated in transportation equipment and fabricated metals.

Instruments and related products. In 1982, the job count rose 3,400 or 2.5 percent to 137,000, a new high for this industry and the only real bright spot in manufacturing. Photographic equipment and supplies gained 4,000 or nearly 5.0 percent; this impetus more than offset layoffs in opthalmic goods, medical instruments and supplies, and "other" instruments and related products. The state trend in instruments countered the national drop of nearly 3.0 percent from 1981 to 1982.

Gains in instruments jobs were centered in the Rochester SMSA.

Primary metals. Payrolls in primary metals were shaved by 9,900, or nearly 20.0 percent to 40,900 in 1982, a new low for primary metals. Employment was down in all components of this industry, with blast furnaces and steel mills taking the largest cut (-5,500 jobs or 30.7 percent), along with iron and steel foundries (-2,000 jobs or 29.4 percent). In the U.S., the primary metals industry declined 18.0 percent.

Among the state's major areas, the Buffalo SMSA lost 5,300 or nearly one-third of its jobs in the industry, while the Syracuse SMSA, New York City, and the Utica-Rome SMSA also shared in the decline.

Nonelectrical machinery. Employment numbered 162,600 in 1982, down 9,800 or 5.7 percent, for the third consecutive year of decline. Job gains occurred only in office, computing, and accounting machinery (+600); they were more than offset by losses in all other components. The largest drops occurred in metalworking machinery and general industrial machinery. The statewide change in this segment was relatively less extensive than in the U.S. where a decline of 8.7 percent occurred.

The Rochester SMSA (-2,200), New York City (-1,300), and Buffalo SMSA (-1,300) all lost jobs in nonelectrical machinery from 1981 to 1982.

In Rochester, layoffs occurred primarily in industries that produce auto-related products.

Transportation equipment. This industry shared in the nationwide auto slump and fell to a new record low of 64,100 jobs in 1982, down 7,700 or 10.7 percent from 1981. Motor vehicles and equipment dropped by 5,800 or 17.5 percent, while "other" transportation equipment and aircraft and parts also lost ground. The nation's transportation equipment manufacturing industry receded by 8.8 percent from 1981 to 1982.

The Buffalo SMSA (-3,600) and Westchester County (-1,100) showed the greatest job losses, with the Syracuse and Nassau-Suffolk SMSA's also registering shrinkages.

Fabricated metal products. A narrowing of 6,700 jobs or 8.4 percent brought the 1982 job level in this category down to 73,200 but this was smaller than the 9.4 percent loss in the nation from 1981 to 1982. All component industries were on the downgrade, with the biggest deficits in structural metal products, cutlery, hand tools and hardware, and metal forgings and stampings. All major areas of the state incurred losses in this industry except the Nassau-Suffolk SMSA.

Electric and electronic machinery. Employment was down by 5,000 or 3.1 percent from 1981 to 156,300 in 1982. Jobs in most component industries declined during the year, with the greatest losses occuring in electrical lighting and wiring equipment and electrical industrial apparatus. Only communication equipment and electronic components and accessories posted gains. In the U.S., employment was off by 3.9 percent in this industry.

Among the major areas, New York City (-1,800) and the Buffalo SMSA (-1,000) showed the largest declines.

Stone, clay and glass products. This industry lost 3,200 jobs (-8.9 percent) and fell to a new low of 32,900 in 1982. All components contributed to the drop. Nationwide, stone, clay and glass fell by 9.6 percent. The state's major areas shared in the loss, with the Buffalo SMSA (-1,100) showing the largest downturn.

Furniture and fixtures. Here the job count slipped for the fourth consecutive year, dropping by 1,000 (-4.6 percent) to 20,900. Household furniture, partitions and fixtures, and "other" furniture and fixtures shared in the decrease. The nation sustained a 5.5 percent decline in this industry during the year. New York City accounted for about half of the loss.

Lumber and wood products except furniture. Jobs were down for the third year in a row; a loss of 900 (-6.3 percent) was registered from 1981 to 1982, when the job count stood at 13,300. In the U.S., employment fell 8.2 percent in the lumber industry.

Nondurable goods manufacturing. Nondurable goods employment declined to 660,600 in 1982, a new record low. Payrolls were down for the fifth consecutive year, 30,800 (4.5 percent) lower than in 1981. Only printing, publishing and allied industries showed a small job gain; all other nondurables fell, some to their lowest level in this series to date. The apparel industry showed the greatest loss, falling 8,600 or 5.2 percent. Nationally, nondurables manufacturing declined 3.9 percent.

Printing, publishing and allied industries. Employment was up for the sixth consecutive year, showing a slight gain (+400) from 1981; the total was 156,700 in 1982. Increases in periodicals and commercial printing offset losses concentrated in books and newspapers. In the U.S., jobs in printing increased by about the same percentage (+0.4) as in the state (+0.3).

In the Nassau-Suffolk SMSA, printing and publishing jobs rose by 600; in all other major areas jobs in this industry were unchanged or showed a small loss.

Apparel and other finished fabric products. The apparel industry fell to a new low of 157,100 in 1982, down 8,600 jobs or 5.2 percent from 1981. Imports and foreign competition continued to cause erosion in all components, with women's, misses' and juniors' outerwear and miscellaneous fabricated textile products hardest hit. The nationwide decline in this industry was 6.9 percent over the year.

New York City, the center of the garment industry, lost 8,000 jobs from 1981 to 1982. Other areas of the state sustained much smaller cutbacks.

Food and kindred products. A series low was set in 1982, when employment fell to 84,300, a decline of 4,300 jobs or 4.9 percent from 1981. All components contributed to the decrease, especially "other" food and kindred products and canning and preserving establishments. In the nation, food and kindred products manufacturing was down slightly (-1.8 percent).

Among the major areas, New York City, the Albany-Schenectady-Troy SMSA and Westchester County registered the largest losses.

Miscellaneous manufacturing industries. Jobs were down for the fifth consecutive year to a record low of 52,300 in 1982. This was a decrease of 3,800 jobs (-6.8 percent) from 1981. Nationally, miscellaneous manufacturing lost 5.7 percent. In the state, toys and sporting goods (-1,500) and costume jewelry and notions (-1,000) declined by the greatest amounts.

Most of the job loss was centered in New York City (-3,100).

Textile mill products. Jobs declined for the ninth consecutive year, dropping 3,300 or 9.4 percent from 1981 to a new low of 31,900 in 1982, as most components shared in the loss. The nation's textile mill industry decreased 9.0 percent during the year.

In New York City, employment was down by 1,600. Small declines also occurred in other major areas, with the Utica-Rome SMSA registering a slight increase.

Chemicals and allied products. Layoffs totalling over 3,000 (-4.4 percent) reduced employment in this industry to 67,800. Nationwide, employment in chemicals manufacturing dropped 3.0 percent. All component industries except soap, cleaners, and toilet goods contributed to the statewide decline.

Among the state's major areas, New York City (-1,400) showed the greatest loss due in part to the move out-of-state by a large employer.

Rubber and miscellaneous plastic products. Jobs numbered 28,800, down 3,000 (9.4 percent) from 1981. The 1982 level was the lowest for this industry since 1975, when the figure stood at 25,700. Nationwide, the decline from 1981 to 1982 (-5.2 percent) was not as great.

In New York City, jobs in the rubber industry were off by 1,100, while in Buffalo they dropped by 400.

Paper and allied products. In 1982, employment fell 2,600 (-5.2 percent) to 47,100, the lowest level to date for this series. All component industries shared in the decrease. In the U.S., the paper manufacturing industry was down 4.1 percent.

In 1982, the job count was lower in New York City and the Buffalo, Albany-Schenectady-Troy, and Syracuse SMSA's.

Leather and leather products. A drop of 1,900 jobs (-6.8 percent) occurred from 1981 to 1982 in the leather industry, bringing the employment level down to 26,000, a record low for this industry. Losses in footwear (except rubber), handbags and personal leather goods, and "other" leather and leather products contributed to the downturn. Nationwide, where a decline of 9.7 percent occurred, this industry was harder hit.

New York City saw a loss of 1,200 jobs in the leather industry in 1982.

Other nondurable goods manufacturing industries. From 1981 to 1982, there was no change in tobacco manufacturers, a very small industry in this state: the employment level remained at 3,000. Petroleum refining, also a small employer in New York State, lost 900 jobs during the year; the level fell to 5,400, a record low.

Nonmanufacturing. Employers in most nonfactory components fared somewhat better than their counterparts in the rest of the country from 1981 to 1982. Payrolls in this sector were augmented by about 18,300 (0.3 percent), compared with a decline of 0.2 percent in the U.S. This was the sixth straight year of increase for the state, and the 5,872,300 average job count in 1982 was a new high for the series.

Services and miscellaneous. This sector, the largest employer in New York State, gained 32,000 jobs (+1.8 percent) from 1981 to a record high level of 1,783,800 in 1982. Changes were mixed among the industry components statewide--seven showed gains, another six showed losses, while one was unchanged. Health, social, legal, and educational services recorded the largest increases, with some of the change due to a reclassification of workers to the social services component. The biggest declines were in business services, motion pictures, and amusement and recreation services.

In New York City, service employment was up by 18,400, primarily due to gains in social and health services. The Nassau-Suffolk SMSA, Rochester SMSA, Westchester County, and the Albany-Schenectady-Troy SMSA were also big gainers. Health services showed strong growth in all these areas.

Finance, insurance and real estate. Jobs in this industry rose for the sixth consecutive year, up by 15,600 (+2.4 percent) from 1981 to 670,500 in 1982. All components except insurance carriers (-900) contributed to the increase. Banking (+9,300) and security and commodity brokers (+5,100) accounted for most of the growth. In the nation, the finance industry expanded by less than one percent.

New York City (+14,200) was responsible for over 90.0 percent of the industry's statewide gain. Increases were centered in banking (+9,600) and security and commodity brokers (+4,700), where workers were added to handle the heavy volume of securities transactions. Almost all other major areas in the state also shared in the finance industry's expansion.

Construction. Employment was up for the second year in a row, showing a small increase (+600 or 0.3 percent) from 1981 to a level of 213,800 in 1982. Nonresidential construction accounted for most of the gain. While general contracting fell by 1,200, this loss was outweighed by gains of 1,100 in special trade contracting and 700 in nonbuilding construction. Nationwide, employment in the construction industry fell by 6.3 percent.

Increases in the Syracuse SMSA (+1,600) where a nuclear power plant is under construction, New York City (+1,500), the Nassau-Suffolk SMSA (+800), Westchester County (+700), and Poughkeepsie SMSA (+200) helped to cancel declines in the Rochester (-800), Buffalo (-800), Utica-Rome (-400), and Albany-Schenectady-Troy (-300) SMSA's.

Mining. The job level for this small industry, 6,400, was unchanged from 1981.

Government. Jobs declined by 10,600 (-0.8 percent) from 1981 to 1,289,700 in 1982. A small increase at the state level (+2,800 or 1.1 percent) was not enough to offset losses on the local (-9,200) and federal (-4,200) levels. Nationally, government jobs were off by 1.5 percent.

The Nassau-Suffolk (-2,900), Buffalo (-2,100) and Rochester (-1,500) SMSA's and Westchester County (-1,200) showed the greatest decreases. Only New York City, Rockland County and the Poughkeepsie SMSA registered small gains.

Retail trade. At 1,001,000 in 1982, employment was down 9,500 or 0.9 percent from 1981. Overall the U.S. retail trade industry was up slightly (+0.4 percent) over the year. Losses in department stores, apparel and accessory stores, and auto dealers and service stations overwhelmed gains in food stores, eating and drinking places, and miscellaneous retail stores.

The largest declines in retail trade employment were in New York City (-5,900), the Buffalo (-1,700), and Albany-Schenectady-Troy (-1,200) SMSA's. In Nassau-Suffolk, retail trade rose 1,200.

Transportation and public utilities. A drop of 7,800 (-1.8 percent) reduced the job count in this industry to 421,900 in 1982. All of the decline occurred in "other" transportation (-6,500), railroads (-2,100), and air transportation (-1,800). The slump in air passenger travel caused major airlines to lay off personnel. Communication gained 2,200 jobs from 1981 to 1982, while electric, gas and sanitary services inched up by 300. The nation's transportation and public utilities industry fell 1.9 percent from 1981 to 1982.

In New York City, employment dropped 6,700, while in the Nassau-Suffolk SMSA it rose 1,600.

Wholesale trade. The job count declined slightly (-200 or 0.4 percent) from 1981 to 453,200 in 1982, the first year to show a decrease since 1975. The nation's wholesale trade industry lost 1.2 percent of its jobs from 1981 to 1982.

In New York City (-2,000), the Buffalo (-400), and Syracuse (-300) SMSA's, the wholesale trade job count receded. In the Nassau-Suffolk SMSA, an advance of 1,900 was recorded.

Table 14. NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
NEW YORK STATE, BY INDUSTRY
1981 AND 1982

(Annual averages in thousands)

Industry	1981	1982	Change 1981-1982	
			Net	Percent
Total nonagricultural employment	7,287.3	7,234.1	-53.2	-0.7
Manufacturing	1,433.3	1,361.8	-71.5	-5.0
Durable goods	741.9	701.2	-40.7	-5.5
Lumber and wood products (except furniture)	14.2	13.3	-0.9	-6.3
Furniture and fixtures	21.9	20.9	-1.0	-4.6
Household furniture	8.9	8.2	-0.7	-7.9
Partitions and fixtures	6.2	6.1	-0.1	-1.6
Other furniture and fixtures	6.9	6.6	-0.3	-4.3
Stone, clay and glass products	36.1	32.9	-3.2	-8.9
Glass and glassware	10.1	9.2	-0.9	-8.9
Miscellaneous and nonmetallic mineral products	11.8	10.3	-1.5	-12.7
Other stone, clay and glass products	14.2	13.4	-0.8	-5.6
Primary metals industries	50.8	40.9	-9.9	-19.5
Blast furnaces, steel mills	17.9	12.4	-5.5	-30.7
Iron and steel foundries	6.8	4.8	-2.0	-29.4
Nonferrous rolling and drawing	14.0	12.9	-1.1	-7.9
Nonferrous foundries	5.6	4.8	-0.8	-14.3
Other primary metals	6.5	6.0	-0.5	-7.7
Fabricated metal products	79.9	73.2	-6.7	-8.4
Cutlery, hand tools and hardware	10.5	9.1	-1.4	-13.3
Fabricated structural metal products	23.0	21.5	-1.5	-6.5
Screw machine products	6.0	5.7	-0.3	-5.0
Metal forgings and stampings	13.8	12.5	-1.3	-9.4
Miscellaneous fabricated metal products	10.9	9.8	-1.1	-10.1
Other fabricated metal products	15.6	14.6	-1.0	-6.4
Machinery (except electrical)	172.4	162.6	-9.8	-5.7
Engines and turbines	16.8	15.6	-1.2	-7.1
Construction, mining and related machinery	6.7	5.6	-1.1	-16.4
Metalworking machinery	21.0	18.7	-2.3	-11.0
Special industrial machinery (except metalworking machinery)	13.5	12.3	-1.2	-8.9
General industrial machinery	26.6	24.4	-2.2	-8.3
Office, computing and accounting machinery	57.2	57.8	+0.6	+1.0
Refrigeration and service industry machinery	11.4	10.7	-0.7	-6.1
Other machinery (except electrical)	19.2	17.5	-1.7	-8.9

Table 14. (continued)

Industry	1981	1982	Change 1981-1982	
			Net	Percent
Electrical machinery	161.3	156.3	-5.0	-3.1
Electrical industrial apparatus	20.7	18.1	-2.6	-12.6
Household appliances	4.9	4.6	-0.3	-6.1
Electrical lighting and wiring equipment	25.1	22.4	-2.7	-10.8
Radio and TV receiving equipment	7.0	6.3	-0.7	-10.0
Communication equipment	48.6	49.9	+1.3	+2.7
Electronic components and accessories	41.9	42.5	+0.6	+1.4
Other electrical equipment and supplies	13.0	12.4	-0.6	-4.6
Transportation equipment	71.8	64.1	-7.7	-10.7
Motor vehicles and equipment	33.1	27.3	-5.8	-17.5
Aircraft and parts	30.7	29.8	-0.9	-2.9
Other transportation equipment	8.0	7.0	-1.0	-12.5
Instruments and related products	133.6	137.0	+3.4	+2.5
Engineering and scientific instruments	11.4	11.8	+0.4	+3.5
Measuring, controlling devices	12.8	13.2	+0.4	+3.1
Medical instruments and supplies	13.8	13.5	-0.3	-2.2
Ophthalmic goods	8.5	7.8	-0.7	-8.2
Photographic equipment and supplies	81.8	85.8	+4.0	+4.9
Other instruments and related products	5.3	5.0	-0.3	-5.7
Nondurable goods	691.4	660.6	-30.8	-4.5
Food and kindred products	88.6	84.3	-4.3	-4.9
Meat products	7.8	7.3	-0.5	-6.4
Canning and preserving	11.4	10.2	-1.2	-10.5
Grain mill products	5.7	5.5	-0.2	-3.5
Bakery products	17.1	16.8	-0.3	-1.8
Sugar and confectionery products	7.6	7.1	-0.5	-6.6
Beverages	15.3	15.0	-0.3	-2.0
Other food and kindred products	23.7	22.4	-1.3	-5.5
Tobacco manufacturers	3.0	3.0	0.0	0.0
Textile mill products	35.2	31.9	-3.3	-9.4
Broadwoven fabric mills	3.9	3.5	-0.4	-10.3
Knitting mills	20.0	18.8	-1.2	-0.6
Dyeing and finishing textiles (except wool and knit)	3.3	2.8	-0.5	-15.2
Other textile mill products	8.0	6.9	-1.1	-13.8
Apparel and other finished fabric products	165.7	157.1	-8.6	-5.2
Men's and boys' suits and coats	9.8	9.2	-0.6	-6.1
Men's and boys' furnishings	15.1	14.5	-0.6	-4.0
Women's, misses' and juniors' outerwear	81.4	78.2	-3.2	-3.9
Women's, children's and infants' undergarments	9.8	9.0	-0.8	-8.2
Miscellaneous apparel and accessories	10.6	10.3	-0.3	-2.8
Miscellaneous fabricated textile products	24.4	22.1	-2.3	-9.4
Other apparel and textile products	14.5	13.8	-0.7	-4.8

Table 14. (continued)

Industry	1981	1982	Change 1981-1982	
			Net	Percent
Paper and allied products	49.7	47.1	-2.6	-5.2
Paper mills (except building paper)	11.5	10.8	-0.7	-6.1
Miscellaneous converted paper products	19.9	19.2	-0.7	-3.5
Paperboard containers and boxes	15.4	14.4	-1.0	-6.5
Other paper and allied products	2.9	2.7	-0.2	-6.9
Printing, publishing and allied industries	156.3	156.7	+0.4	+0.3
Newspapers	34.1	33.6	-0.5	-1.5
Periodicals	27.5	28.4	+0.9	+3.3
Books	24.7	24.1	-0.6	-2.4
Commercial printing	38.4	39.3	+0.9	+2.3
Blankbooks and bookbinding	8.9	8.8	-0.1	-1.1
Printing trade services	8.8	8.6	-0.2	-2.3
Other printing and publishing	13.9	13.9	0.0	0.0
Chemicals and allied products	70.9	67.8	-3.1	-4.4
Industrial inorganic chemicals	7.6	7.3	-0.3	-3.9
Plastics, materials and synthetics	5.6	5.2	-0.4	-7.1
Drugs	21.9	21.2	-0.7	-3.2
Soap, cleaners and toilet goods	18.8	18.9	+0.1	+0.5
Industrial organic chemicals	10.1	8.9	-1.2	-11.9
Other chemicals and allied products	6.8	6.3	-0.5	-7.4
Petroleum refining and related industries	6.3	5.4	-0.9	-14.3
Rubber and miscellaneous plastic products	31.8	28.8	-3.0	-9.4
Rubber and rubber products	3.5	3.3	-0.2	-5.7
Miscellaneous plastic products	28.3	25.5	-2.8	-9.9
Leather and leather products	27.9	26.0	-1.9	-6.8
Footwear (except rubber)	8.8	8.4	-0.4	-4.5
Handbags and personal leather goods	10.3	9.7	-0.6	-5.8
Other leather and leather products	8.8	7.9	-0.9	-10.2
Miscellaneous manufacturing industries	56.1	52.3	-3.8	-6.8
Jewelry, silverware and plated ware	15.5	15.3	-0.2	-1.3
Toys and sporting goods	13.4	11.9	-1.5	-11.2
Pens, pencils, office and art supplies	3.7	3.4	-0.3	-8.1
Costume jewelry and notions	7.1	6.1	-1.0	-14.1
Other miscellaneous	16.4	15.6	-0.8	-4.9
Nonmanufacturing	5,854.0	5,872.3	+18.3	+0.3
Mining	6.4	6.4	0.0	0.0
Construction	213.2	213.8	+0.6	+0.3
Building construction-general contracting	42.5	41.3	-1.2	-2.8
Nonbuilding construction-general contracting	30.2	30.9	+0.7	+2.3
Construction-special trade contracting	140.4	141.5	+1.1	+0.8

Table 14. (continued)

Industry	1981	1982	Change 1981-1982	
			Net	Percent
Transportation and public utilities	429.7	421.9	-7.8	-1.8
Railroad transportation	18.3	16.2	-2.1	-11.5
Air transportation	54.0	52.2	-1.8	-3.3
Other transportation	163.7	157.2	-6.5	-4.0
Communication	135.8	138.0	+2.2	+1.6
Telephone and telegraph	101.9	102.3	+0.4	+0.4
Electric, gas and sanitary services	58.0	58.3	+0.3	+0.5
Wholesale and retail trade	1,465.7	1,454.3	-11.4	-0.8
Wholesale trade	455.2	453.2	-2.0	-0.4
Retail trade	1,010.5	1,001.0	-9.5	-0.9
Building material, hardware, farm equipment	29.2	29.3	+0.1	+0.3
General merchandise	158.1	148.6	-9.5	-6.0
Department stores	136.3	127.6	-8.7	-6.4
Food	181.5	182.5	+1.0	+0.6
Auto dealers and service stations	77.8	77.5	-0.3	-0.4
Apparel and accessories	85.2	83.0	-2.2	-2.6
Furniture and fixtures	40.9	40.9	0.0	0.0
Eating and drinking places	298.9	299.8	+0.9	+0.3
Miscellaneous retail stores	138.9	139.5	+0.6	+0.4
Finance, insurance and real estate	654.9	670.5	+15.6	+2.4
Banking	229.0	238.3	+9.3	+4.1
Security and commodity brokers	102.3	107.4	+5.1	+5.0
Insurance carriers	118.8	117.9	-0.9	-0.8
Insurance agents and brokers	50.5	51.0	+0.5	+1.0
Real estate combined with insurance	116.0	116.2	+0.2	+0.2
Credit agencies other than banks, holding and other investments	38.3	39.6	+1.3	+3.4
Services and miscellaneous	1,783.8	1,815.8	+32.0	+1.8
Hotels (year-round)	54.4	55.4	+1.0	+1.8
Hospitals (nongovernmental)	259.7	267.3	+7.6	+2.9
Government	1,300.3	1,289.7	-10.6	-0.8
Federal	156.8	152.6	-4.2	-2.7
State	251.5	254.3	+2.8	+1.1
Local	892.0	882.8	-9.2	-1.0

Growth and Declining Industries

Budget restrictions at all levels of government, increased unemployment and other negative economic factors have made coordinated efforts toward improving the economy of the state of extreme importance. Administrators and planners have recently focused on attracting new business or firms to the state, developing jobs for the unemployed and developing training programs in occupations with substantial demand.

The industries which should offer the greatest potential for job development and training efforts are those which have experienced long-term growth and at the same time managed to resist furloughing during slack periods in the economy. On the other hand, the potential is more limited in those categories which have recorded long-term cutbacks or which turned downward during recessions.

The following sections of this report identify industries which registered marked employment expansions (growth industries) and contractions (declining industries) during the past five and ten-year periods. In addition, job levels during four recessionary periods (beginning in 1969, 1973, 1980 and 1981) were studied to determine how these industries reacted to national pressures.

Growth industries: "Long-term" growth industries shown on the table below experienced substantial net employment increases from 1972 to 1982. During that time, these industries added over 650,000 jobs to the state's economy; over two-thirds of the new job growth occurred from 1977 to 1982. In 1982, these industries accounted for 3,485,300 jobs or 48.2 percent of all nonagricultural employment in the state. Over 40.0 percent of "growth industry" jobs were in the services category; 32.6 percent were in government; 12.6 percent were in retail trade; and 11.4 percent were in finance, insurance and real estate. Only one manufacturing industry was represented among the growth industries.

Table 15. NONAGRICULTURAL INDUSTRIES REGISTERING THE LARGEST EMPLOYMENT INCREASES NEW YORK STATE 1972-1982 AND 1977-1982

Industry	Annual average employment increase			
	1972-1982		1977-1982	
	Net (000's)	Percent	Net (000's)	Percent
Health services	137.0	40.7	73.7	18.4
Business services	98.4	35.8	75.5	25.3
Social services*	68.2	75.4	54.5	52.4
Eating and drinking places	67.1	28.8	29.1	10.7
Banking	59.1	33.0	45.7	23.7
State government	55.7	28.0	22.0	9.5
Educational services	35.3	24.8	30.6	20.8

Table 15. (continued)

Industry	Annual average employment increase			
	1972-1982		1977-1982	
	Net (000's)	Percent	Net (000's)	Percent
Miscellaneous services	31.0	43.2	21.8	26.9
Legal services	26.5	57.2	16.4	29.1
Security and commodity brokers	16.1	17.6	34.4	47.1
Photographic equipment and supplies manufacturing	15.0	21.2	10.6	14.1
Miscellaneous retail trade	12.6	9.9	8.6	6.6
Amusement and recreation services, except motion pictures	12.6	23.0	7.5	12.5
Local government	10.3	1.2	6.2	0.7
Insurance agents and brokers	10.3	25.3	8.0	18.6

* This industry experienced a large increase in employment not attributable to growth between 1980 and 1982. This increase was due to a reclassification of a large number of workers from the "domestic" category to social services.

Additional industries did not exhibit significant growth from 1972 to 1977 but recorded notable job increases from 1977 to 1982. They include special trade contracting (+20,500 jobs or 16.9 percent); communications (+12,800 jobs or 10.2 percent); and office computing and accounting machinery manufacturing (+10,300 jobs or 21.7 percent).

These "growth industries" are not exhaustive, but reflect those categories recording the most significant advances over the last five and ten-year periods. Some of the industries which registered considerable growth over the last ten years are not expected to continue hiring at pre-1982 levels. For example, continued expansions are not expected in state and local government because of recent budgetary constraints, although some job openings will result from replacement needs. Nearly all of the increase in the social services industry job count resulted from a reclassification of workers, and further increments of that magnitude are not expected.

The following industries employed 45.2 percent of all nonagricultural wage and salary workers in New York State in 1982. These industries generally experienced some long-term growth and suffered no significant cutbacks during recent recessions:

Measuring and controlling devices manufacturing
Photographic equipment and supplies manufacturing
Electric, gas and sanitary services
Retail food stores
Eating and drinking places
Miscellaneous retail stores (includes establishments such as drug, liquor, sporting goods, toy, book, stationary, jewelry, cameras, and gift stores as well as mail order houses, fuel dealers, florists, and newsstands)

Banking
Credit agencies, except banks, and holding and other investment companies
Insurance agents, brokers and service
Amusement and recreation services, except motion pictures
Health services
Legal services
Social services
Miscellaneous services (includes accounting, auditing and bookkeeping; engineering, architectural and surveying; noncommercial educational, scientific and research organizations; and services not elsewhere classified)
Government

Most of these industries appear among the growth industries cited for the years 1972-1982. Three of the recession-proof industries (measuring and controlling devices; electric, gas and sanitary services; and credit agencies) registered some smaller gains over the preceding five- and 10-year periods. Some of the industries which recorded long-term growth were affected by recessions but subsequently exhibited recovery: business services; security and commodity brokers; educational services; special trade contracting; communications; office, computing and accounting machinery manufacturing; and medical instruments and supplies.

Declining industries: The industries included in the following table experienced substantial job declines during the last five- and 10-year periods:

Table 16. NONAGRICULTURAL INDUSTRIES REGISTERING THE LARGEST EMPLOYMENT DECREASES
NEW YORK STATE
1972-1982 AND 1977-1982

Industry	Annual average employment losses			
	1972-1982		1977-1982	
	Net (000's)	Percent	Net (000's)	Percent
Apparel manufacturing	67.6	30.1	27.4	14.9
General merchandise stores	43.8	22.8	26.9	15.3
Other transportation	32.6	17.2	8.7	5.2
Miscellaneous manufacturing	27.8	34.7	15.2	22.5
Food and kindred products mfg.	27.7	24.7	10.7	11.3
Textile mill products mfg.	24.2	43.1	12.0	27.3
Primary metals manufacturing	22.8	35.8	16.9	29.2
Federal government	20.3	11.7	9.3	5.7
Retail auto dealers and service stations	17.6	18.5	13.5	14.8
Fabricated metals manufacturing	16.8	18.7	7.7	9.5
Transportation equipment mfg.	15.0	19.0	15.0	19.0
Leather and leather products mfg.	12.5	32.5	4.0	13.3
Insurance carriers	11.0	8.5	1.3	1.1
Retail apparel and accessory stores	10.8	11.5	1.0	1.2
Railroad transportation	10.1	38.4	6.6	28.9
Chemical and allied products mfg.	10.0	12.9	6.8	9.1

Most of these are manufacturing industries, particularly nondurables. Among durables, industries related to automobile production and the steel industry are included.

Although some job openings will occur as a result of replacement needs, the following industries will offer the fewest job opportunities because they have undergone long-term declines and significant layoffs have occurred during recessionary periods:

Manufacturing

Miscellaneous nonmetallic mineral products
Blast furnace and basic steel products
Fabricated structural metal products
Special industry machinery
Household appliances
Radio and TV receiving equipment
Grain mill products
Beverages
Textile mill products
Apparel
Paper mills, except building paper
Paperboard containers and boxes
Blankbooks and bookbinding
Industrial inorganic chemicals
Drugs
Rubber and rubber products
Footwear, except rubber
Handbags and personal leather goods
Toys and sporting goods
Pens, pencils, office and art supplies
Costume jewelry and notions

Nonmanufacturing

Heavy construction
Railroad transportation
General merchandise stores
Apparel and accessory stores

Nearly three-quarters of the industries known to be recession-prone either appear on the declining industries table, or are components of industries on that table.

Some of the industries included in Table 16 such as federal government, retail auto dealers and service stations, and transportation equipment manufacturing--have experienced long-term losses unrelated to cyclical fluctuations in the economy.

Outlook

From 1982 to 1983, nonfarm jobs in New York State are projected to increase slightly (+10,000 or +0.1 percent). From 1983 to 1984, a larger expansion (+119,000 or 1.6 percent) is expected.

The service industry is forecast to continue its steady rate of growth, gaining 95,000 jobs (+5.2 percent) during the two-year period. Construction (+6.5 percent); finance, insurance and real estate (+4.8 percent); and trade (+1.5 percent) should also show growth from 1982 to 1984.

Government is predicted to decline in both 1983 and 1984, falling 11,000 (-0.9 percent) between 1982 and 1984. Losses are expected from 1982 to 1983 in manufacturing (-42,000 or -3.1 percent) and transportation and public utilities (-6,000 or -1.4 percent), although both of these industries are projected to gain jobs from 1983 to 1984.

Table 17 shows projected annual employment in nonagricultural industries for 1983 and 1984.

Table 17. NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
NEW YORK STATE
1982 AND PROJECTED 1983 AND 1984

(In thousands)

Industry	1982	1983	Change 1982-1983		1984	Change 1983-1984		Change 1982-1984	
			Net	Percent		Net	Percent	Net	Percent
Total	7,234	7,244	+10	+0.1	7,363	+119	+1.6	+129	+1.8
Manufacturing	1,362	1,320	-42	-3.1	1,343	+23	+1.7	-19	-1.4
Durable	701	671	-30	-4.3	688	+17	+2.5	-13	-1.9
Nondurable	661	649	-12	-1.8	655	+6	+0.9	-6	-0.9
Mining	6	6	0	0.0	6	0	0.0	0	0.0
Construction	214	220	+6	+2.8	228	+8	+3.6	+14	+6.5
Finance, insurance and real estate	670	684	+14	+2.1	702	+18	+2.6	+32	+4.8
Transportation and public utilities	422	416	-6	-1.4	418	+2	+0.5	-4	-0.9
Trade	1,454	1,462	+8	+0.6	1,476	+14	+1.0	+22	+1.5
Services	1,816	1,856	+40	+2.2	1,911	+55	+3.0	+95	+5.2
Government	1,290	1,280	-10	-0.8	1,279	-1	-0.1	-11	-0.9

SOURCE: New York State Division of the Budget for 1983 and 1984 projections.

Hours worked. Hours worked are a leading economic indicator, since before hiring or laying off workers employers generally lengthen or shorten the workweek. In the state, the length of the workweek for factory production workers was 38.8 hours in 1982, down 0.6 hour from 1981. In the nation, the figure was nearly the same, 38.9 hours in 1982, compared with 39.8 in 1981. Among durable goods manufacturing industries in New York State, average weekly hours declined in all components except furniture and fixtures. Primary metals and nonelectrical machinery registered the largest losses (-1.2 hours). All nondurable manufacturing industries experienced shortened workweeks also, with textiles showing the biggest drop (-1.4 hours). In the U.S., the average workweek was cut back in all components of both durable and nondurable goods manufacturing.

Among the few nonmanufacturing industries in New York State for which data are available, changes in average weekly hours of nonsupervisory production workers were mixed. Wholesale trade and year-round hotels were up slightly (+0.2 hour) as was construction (+0.1 hour). Banking (-1.0 hour); telephone and telegraph (-0.6 hour); electric, gas and sanitary services (-0.2 hour); and retail trade (-0.2 hour) sustained declines in average weekly hours.

Weekly earnings. Average weekly earnings of factory production workers in New York State failed to keep pace with inflation from 1981 to 1982. At $323.98, earnings were up 4.9 percent from 1981 but the U.S. Consumer Price Index (all urban consumers) rose 6.1 percent from year-to-year. Nationally, weekly earnings averaged $330.65 for manufacturing production workers in 1982, up 4.0 percent from 1981. Among the state's durable goods industries, only workers in instruments (+7.5 percent) and lumber products (+6.3 percent) showed gains in earnings that surpassed the inflation rate. Employees in transportation equipment manufacturing ($477.24) had the highest weekly earnings among the durables category, while those in lumber had the lowest ($246.24) as well as the shortest workweek (38.9 hours).

Among nondurables (traditionally lower paying than durables) increases from 1981 to 1982 kept pace with the inflation rate in more than half of the sector's component industries. Rubber and plastics (+8.7 percent); miscellaneous manufacturing (+7.8 percent); and paper products (+7.5 percent) showed the greatest gains. Workers in printing and publishing ($387.08) were the highest paid; those in leather products ($196.26) the lowest.

In nonmanufacturing, workers' earnings in banking (+15.6 percent); year-round hotels (+9.8 percent); and construction (+9.4 percent) rose by the greatest amounts. Employees in electric, gas and sanitary services had the highest average weekly earnings ($512.32) as well as the longest workweek, while workers in retail trade (influenced by part-time workers) had both the shortest workweek (30.7 hours) and the lowest pay ($179.29). (See Table 18.)

Table 19 shows average weekly earnings, by industry, of employees covered by the New York State Unemployment Insurance Law. These data are for 1981, since earnings for 1982 were not available at the time of printing.

A comparison of 1981 earnings, by industry, for nonagricultural (Table 18) and UI covered industries (Table 19) shows that average weekly earnings were higher in the UI-covered employment series for all industries except construction and hotels. The higher averages in UI-covered employment are in part due to the inclusion of salaries earned by supervisory and administrative employees.

Table 18. HOURS AND EARNINGS IN SELECTED INDUSTRIES
NEW YORK STATE
1981 - 1982

Industry	Average weekly hours		Average weekly earnings		
	1981	1982	1981	1982	Percent change
Manufacturing	39.4	38.8	$308.90	$323.98	+4.9
Durable goods	40.8	40.1	352.51	368.52	+4.5
Lumber products	39.2	38.9	231.67	246.24	+6.3
Furniture	39.0	39.0	251.94	258.18	+2.5
Stone, clay, glass	41.2	40.3	354.32	369.95	+4.4
Primary metals	40.4	39.2	431.88	440.22	+1.9
Fabricated metals	40.2	39.3	311.55	329.73	+5.8
Nonelectrical machinery	41.2	40.0	362.56	374.40	+3.3
Electrical machinery	40.5	39.8	303.35	316.41	+4.3
Transportation equipment	41.7	41.0	455.78	477.24	+4.7
Instruments	41.8	41.3	379.13	407.63	+7.5
Nondurable goods	38.0	37.5	264.86	280.88	+6.0
Food products	41.6	41.1	317.82	334.97	+5.4
Textiles	40.1	38.7	221.35	222.14	+0.4
Apparel	34.4	34.1	193.33	203.24	+5.1
Paper products	42.3	41.8	309.21	332.31	+7.5
Printing and publishing	37.2	36.9	363.07	387.08	+6.6
Chemicals	42.0	40.8	355.32	377.40	+6.2
Rubber and plastics	39.3	39.1	254.27	276.44	+8.7
Leather products	37.5	37.1	186.00	196.26	+5.5
Miscellaneous manufacturing	37.7	37.5	229.97	247.88	+7.8
Construction	35.9	36.0	432.60	473.40	+9.4
Telephone and telegraph	40.8	40.2	449.21	482.00	+7.3
Electric, gas and sanitary services	43.0	42.8	471.71	512.32	+8.6
Wholesale trade	37.7	37.9	315.55	339.21	+7.5
Retail trade	30.9	30.7	172.11	179.29	+4.2
Banking	36.7	35.7	239.65	277.03	+15.6
Hotels (year-round)	32.4	32.6	204.77	224.94	+9.8

Table 19. AVERAGE WEEKLY EARNINGS OF EMPLOYEES COVERED BY THE NEW YORK STATE UNEMPLOYMENT INSURANCE LAW, BY INDUSTRY DIVISION AND MAJOR GROUP
NEW YORK STATE
1981

Industry division and group	Earnings
All industries	$329.40
Manufacturing	385.17
Durable goods	419.47
Lumber and wood products	254.05
Furniture and fixtures	270.73
Stone, clay and glass products	405.33
Primary metal industries	461.11
Fabricated metal products	342.49
Machinery, except electrical	445.55
Electrical machinery	381.25
Transportation equipment	493.38
Instruments, photo and optical goods	467.88
Nondurable goods	348.65
Food and kindred products	381.17
Tobacco manufacturers	494.31
Textile mill products	291.23
Apparel	255.60
Paper and allied products	373.07
Printing and publishing	393.70
Chemicals and allied products	469.37
Petroleum refining	866.30
Rubber and miscellaneous plastics products	284.68
Leather and leather products	215.44
Miscellaneous manufacturing	286.14
Nonmanufacturing	311.59
Agriculture, forestry and fisheries	208.23
Mining	592.04
Contract construction	388.74
General building contractors	365.21
General contractors other than building	497.77
Special building trade contractors	372.49
Transportation and public utilities	460.70
Local and suburban transit and interurban passenger transportation	227.72
Motor freight transportation and warehousing	370.46
Water transportation	585.44
Transportation by air	568.73
Pipeline transportation	531.35
Transportation services	380.00
Communication	510.33
Electric, gas and sanitary services	503.51

Table 19. (continued)

Industry division and group	Earnings
Trade	$258.42
Wholesale	428.47
Durable goods	420.97
Nondurable goods	436.76
Retail	181.59
Building materials, hardware, garden supplies and mobile home dealers	241.65
General merchandise	183.89
Food stores	182.35
Auto dealers and service stations	258.35
Apparel and accessories	192.43
Retail furniture, home furnishings	240.81
Eating and drinking places	129.21
Miscellaneous retail stores	211.03
Finance, insurance and real estate	398.19
Banking	357.18
Credit agencies other than banks	325.58
Security and commodity brokers	682.08
Insurance carriers	354.29
Insurance agents, brokers, service	377.20
Real estate	278.42
Combinations of real estate, insurance, loans, law offices	282.47
Holding and other investment companies	591.46
Services	279.86
Hotels and other lodging places	194.97
Personal services	175.48
Business services	303.33
Auto repair services and garages	250.32
Miscellaneous repair services	295.37
Motion pictures	370.55
Amusement and recreation services	255.56
Medical and other health services	296.60
Legal services	405.88
Educational services	248.38
Social services	182.72
Museums, art galleries, gardens	255.82
Membership organizations	213.51
Private households	126.65
Miscellaneous services	423.66
Government	430.66
Federal	315.14
State and local	329.73
Unclassified establishments	251.39

Recent Trends

New York State's unemployment rate averaged 8.6 percent in 1982, up a full percentage point from 1981 and the highest rate since 1977, when it stood at 9.1 percent. The number of persons unemployed in the state rose from 613,000 in 1981 to 687,000 in 1982, again the highest level since 1977.

Despite the increase in unemployment, New York State fared better than the nation in 1982. In the U.S., the rate rose from 7.6 percent in 1981 to 9.7 percent in 1982. This was the first time since 1970 that the state unemployment rate was below the national rate. The increase in national unemployment was concentrated in the industrialized North and South Central regions. Michigan continued to have the highest rate at 15.5 percent, while South Dakota had the lowest, at 5.5 percent.

Twenty-seven states had higher 1982 unemployment rates than New York. Rates for both the Northeast 1/ (9.0 percent) and Middle Atlantic 2/ regions (9.4 percent) were also higher than the state's. New York's unemployment rate was higher than its eastern neighbors: Connecticut (6.9 percent), Vermont (6.9 percent), and Massachusetts (7.9 percent). Along its southern border, unemployment rates were higher in Pennsylvania (10.9 percent) and New Jersey (9.0 percent) than in New York.

Within New York State, the Buffalo SMSA had the highest unemployment rate among all major metropolitan areas at 12.6 percent in 1982, up from 9.5 percent in 1981. The Poughkeepsie SMSA had the lowest at 5.9 percent, up from 5.6 percent the previous year.

1. Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York and Pennsylvania.
2. Includes New Jersey, New York, and Pennsylvania.

Table 20. NUMBER UNEMPLOYED AND UNEMPLOYMENT RATES
NEW YORK STATE AND UNITED STATES
1972 - 1982
(Annual averages)

Year	Total unemployed (000's)				Unemployment rate	
	New York State	Percent change from previous year	United States	Percent change from previous year	New York State	United States
1972	500	+2.0	4,882	-2.7	6.7	5.6
1973	404	-19.2	4,365	-10.6	5.4	4.9
1974	481	+19.1	5,156	+18.1	6.4	5.6
1975	726	+50.9	7,929	+53.8	9.5	8.5
1976	788	+8.5	7,406	-6.6	10.3	7.7
1977	703	-10.8	6,991	-5.6	9.1	7.1
1978	602	-14.4	6,202	-11.3	7.7	6.1
1979	570	-5.3	6,137	-1.0	7.1	5.8
1980	597	+4.7	7,637	+24.4	7.5	7.1
1981	613	+2.7	8,273	+8.3	7.6	7.6
1982	687	+12.1	10,678	+29.1	8.6	9.7

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey.

Reasons for Unemployment

Unemployed persons are classified within one of four major groups in the Current Population Survey, published by the Bureau of Labor Statistics:

1. Job losers--persons whose employment ended involuntarily, who immediately began looking for work; and persons on layoff.

2. Job leavers--persons who quit or otherwise terminated their employment voluntarily and immediately began looking for work.

3. Reentrants--persons who previously worked at a full-time job lasting two weeks or longer but were out of the labor force before beginning their most recent efforts to look for work.

4. New entrants--persons who never worked at a full-time job lasting two weeks or longer.

In 1982, 58.3 percent of New York State's unemployed were classified as job losers, nearly the same proportion as that nationwide (58.7 percent). In both the state and nation, the percentages of job losers were higher in 1982 than 1981. Reentry into the labor force was the next most likely reason for unemployment in both the state (20.4 percent) and nation (22.3 percent) in 1982. Both percentages were lower than the corresponding figures for 1981. New entrants comprised 14.0 percent of the state's unemployed in 1982, unchanged from 1981, while nationwide, new entrants accounted for 11.1 percent of the jobless, down slightly from 11.9 percent in 1981. Those who left jobs voluntarily made up the smallest percentages of unemployed persons in both the state (7.3 percent) and nation (7.9 percent). The percentages of job leavers declined in both the state and nation from 1981 to 1982.

Table 21 compares the percent distribution of unemployed persons by reason in the state and nation.

Table 21. PERCENT DISTRIBUTION OF THE UNEMPLOYED, BY REASON
NEW YORK STATE AND UNITED STATES
1982

(Annual averages)

Reason	New York State	United States	Difference NY - US
All reasons	100.0	100.0	-
Job losers	58.3	58.7	-0.4
Job leavers	7.3	7.9	-0.6
Reentrants	20.4	22.3	-1.9
New entrants	14.0	11.1	+2.9

NOTE: 1982 data are preliminary and subject to revision.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1983.

Duration of Unemployment

In 1982, the average duration of unemployment in New York State was slightly longer than for the nation as a whole, 16.5 versus 15.6 weeks.

About one-third (33.5 percent) of the state's unemployed were out of work less than five weeks, compared with 36.4 percent nationally. In New York State another third were out of work between five and 14 weeks, and the remaining third were unemployed 15 or more weeks. Nearly half of the jobless in the latter category were unemployed for 27 or more weeks.

Table 22 compares duration of unemployment in New York State and the United States in 1982.

Table 22. PERCENT DISTRIBUTION OF THE UNEMPLOYED
BY DURATION OF UNEMPLOYMENT
NEW YORK STATE AND UNITED STATES
1982

(Annual averages)

Duration	New York State	United States	Difference NY - US
Total unemployed	100.0	100.0	-
Less than 5 weeks	33.5	36.4	-2.9
5-14 weeks	32.4	31.0	+1.4
15+ weeks	34.3	32.6	+1.7
27+ weeks	15.9	16.6	-0.7
Mean duration (in weeks)	16.5	15.6	+0.9

NOTE: Detail may not add to total due to rounding. Also, 1982 data are preliminary and subject to revision.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, and Employment and Earnings, January 1983.

Unemployment by Age and Sex

Youths between the ages of 16 and 24 years made up 40.5 percent of the state's unemployed in 1982, about the same percentage as for this age group nationwide (40.9 percent). From 1981 to 1982, declines occurred in the proportion of youth among the unemployed in both the state and nation. Teenagers (16 to 19) in New York State had an unemployment rate of 22.4 percent in 1982, up slightly from 22.0 percent in 1981. In the nation, the teenage unemployment rate rose from 19.6 percent in 1981 to 23.2 percent in 1982.

Those in the prime working age group (25 to 44 years old) comprised a smaller percentage of the unemployed in New York State (39.7 percent) than in the nation (43.0 percent) in 1982. As a percent of total unemployed this age group rose in both the state and U.S. from 1981 to 1982. The unemployed 45 to 64 years old jumped from 16.3 percent in 1981 to 18.2 percent in 1982 in the state. In the nation, an increase of 1.1 percentage points occurred in the proportion among the unemployed aged 45 to 64.

Women accounted for 43.7 percent of the state's unemployed in 1982, down slightly from 44.9 percent in 1981. In the U.S., women comprised 42.1 percent of the unemployed in 1982, compared with 44.7 percent in 1981. Unemployment rates in 1982 for women aged 20 and over in the state and nation averaged 7.5 percent and 8.3 percent, respectively, up from 1981 rates for both areas, but lower than the 1982 rates for males aged 20 and over.

Tables 23 and 24 show percent distribution of the unemployed by age and sex, and unemployment rates by sex and for selected age groups in New York State and the United States.

Table 23. PERCENT DISTRIBUTION OF UNEMPLOYED PERSONS
BY SEX AND AGE GROUP
NEW YORK STATE AND UNITED STATES
1982

(Annual averages)

Group	New York State	United States	Difference NY - US
All 16 and over	100.0	100.0	-
16-19 years	17.8	18.5	-0.7
20-24 years	22.7	22.4	+0.3
25-44 years	39.7	43.0	-3.3
45-64 years	18.2	15.1	+3.1
65+	1.5	1.0	+0.5
Total males	56.4	57.9	-1.5
16-19 years	9.0	10.2	-1.2
20-24 years	13.7	13.2	+0.5
25-44 years	23.3	25.0	-1.7
45-64 years	9.3	8.8	+0.5
65+	0.9	0.6	+0.3
Total females	43.7	42.1	+1.6
16-19 years	8.7	8.3	+0.4
20-24 years	9.0	9.2	-0.2
25-44 years	16.3	18.0	-1.7
45-64 years	8.9	6.3	+2.6
65+	0.6	0.4	+0.2

NOTE: Detail may not add to total due to rounding. Also, 1982 data are preliminary and subject to revision.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey and Employment and Earnings, January 1983.

Table 24. ANNUAL AVERAGE UNEMPLOYMENT RATES BY SEX AND FOR SELECTED AGE GROUPS NEW YORK STATE AND UNITED STATES 1981 AND 1982

Area and group	Unemployment rate	
	1981	1982
New York State		
All persons, 16 years and over	7.6	8.6
Both sexes, 20 years and over	6.5	7.6
Male	6.3	7.6
Female	6.7	7.5
Both sexes, 16-19 years	22.0	22.4
United States		
All persons, 16 years and over	7.6	9.7
Both sexes, 20 years and over	6.5	8.6
Male	6.3	8.8
Female	6.8	8.3
Both sexes, 16-19 years	19.6	23.2

NOTE: 1982 data are preliminary and subject to revision.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, and Employment and Earnings, January 1983.

Unemployment by Race and Hispanic Origin

In 1982, blacks accounted for one-fifth of the state's unemployed, but in 1981 for one-quarter of the total. Nationwide, the percentage of blacks among the unemployed also fell slightly, from 20.9 percent in 1981 to 20.1 percent in 1982. The unemployment rate for blacks in New York State was 13.8 percent in 1982, down from 14.7 percent in 1981. The state rate was lower than the national rate of 18.9 percent in 1982. The U.S. unemployment rate for blacks rose 3.3 percentage points from 1981 to 1982.

Persons of Hispanic origin comprised 11.5 percent of the state's unemployed in 1982, up slightly from 10.3 percent in 1981. Hispanics made up 7.7 percent of the nation's unemployed in 1982; nearly unchanged from 1981. The unemployment rate of Hispanics statewide was 13.3 percent, nearly the same as the national rate (13.8 percent) in 1982. Increases occurred in the unemployment rate for this group in both the state and nation from 1981 to 1982.

Tables 25 and 26 show percent distribution of the unemployed and unemployment rates by race and Hispanic origin for the state and nation.

Table 25. PERCENT DISTRIBUTION OF THE UNEMPLOYED BY RACE AND HISPANIC ORIGIN
NEW YORK STATE AND UNITED STATES
1981 AND 1982

Group	New York State		United States	
	1981	1982	1981	1982
Total, 16 years of age and over	100.0	100.0	100.0	100.0
White	73.2	77.6	76.7	77.2
Black	25.0	20.3	20.9	20.1
Hispanic origin	10.3	11.5	7.5	7.7

NOTE: 1982 data are preliminary and subject to revision.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, and Employment and Earnings, January 1983.

Table 26. ANNUAL AVERAGE UNEMPLOYMENT RATES
BY RACE AND HISPANIC ORIGIN
NEW YORK STATE AND UNITED STATES
1981 AND 1982

Group	New York State		United States	
	1981	1982	1981	1982
All persons, 16 years and over	7.6	8.6	7.6	9.7
White	6.6	7.8	6.7	8.6
Black	14.7	13.8	15.6	18.9
Hispanic origin	11.1	13.3	10.4	13.8

NOTE: 1982 data are preliminary and subject to revision.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, and Employment and Earnings, January 1983.

Outlook

New York State's unemployment rate is projected to increase slightly to about 8.7 percent in Fiscal Year 1984 (October 1, 1983 - September 30, 1984).

Increases in the unemployment rate from calendar year 1982 to fiscal year 1984 are expected in all of the state's metropolitan areas except the Nassau-Suffolk SMSA. The Buffalo SMSA is expected to have the highest rate at 13.6 percent.

Unemployment Covered by Unemployment Insurance

Individuals who received unemployment benefits numbered 941,396 during 1982, up 12,358 or 1.3 percent from 1981. A characteristic difference between beneficiaries and unemployed individuals not covered by unemployment insurance is that beneficiaries have had recent work experience. They are usually not recent or new entrants into the labor market and they are job losers rather than job leavers. Recent entrants or job leavers are usually ineligible for or not entitled to benefits.

Significant characteristics of UI beneficiaries in New York State during 1982 include the following:

- Only 3.3 percent were under 20 years of age, reflecting the fact that most of the total unemployed in this age group lacked qualifying work experience. Persons in the prime working age group (25-44 years) accounted for nearly half (48.0 percent) of the beneficiaries but 39.7 percent of the total unemployed. Beneficiaries 45 years of age and older made up 30.5 percent of the total, although they accounted for 19.7 percent of all unemployed persons.

- The majority (57.8 percent) of UI beneficiaries in 1982 were blue-collar workers; the proportion was up 1.3 percentage points compared with 1981. Former clerical and sales workers comprised 17.2 percent, while professional, technical and managerial workers accounted for 11.8 percent. About one in ten beneficiaries was a former service worker. The percentage of manufacturing workers among beneficiaries rose from 33.9 percent in 1981 to 38.1 percent in 1982. Another 53.0 percent of beneficiaries indicated nonmanufacturing as their industry of last employment, while 5.1 percent last worked in government.

- Nearly two out of three beneficiaries had 12 or more years of education; one-tenth had 16 or more years of schooling.

- Minorities comprised one-quarter of UI beneficiaries. Blacks (not Hispanic) accounted for 12.8 percent of total beneficiaries, while Hispanics made up 9.6 percent.

- Women made up 41.4 percent of beneficiaries in 1982, down slightly from 42.5 percent in 1981. Among all the unemployed in New York State in 1982, women accounted for 43.7 percent. Of women beneficiaries, 45.5 percent were blue-collar workers, while 29.2 percent were clerical and sales workers. One-half of the women formerly worked in nonmanufacturing industries; 41.0 percent in manufacturing; and 6.8 percent in government.

Table 27. SELECTED CHARACTERISTICS OF INDIVIDUALS RECEIVING UNEMPLOYMENT INSURANCE
NEW YORK STATE
1982

Characteristics	Number	Percent of total
	Age group	
All ages	941,396	100.0
Under 20	31,062	3.3
20-24	156,213	16.6
25-34	272,762	29.0
35-39	97,279	10.3
40-44	82,007	8.7
45-54	147,133	15.6
55-59	68,061	7.2
60-64	42,753	4.5
65 and over	28,817	3.1
Unknown	15,309	1.6
	Ethnic group	
All groups	941,396	100.0
White	665,233	70.7
Black	120,047	12.8
American Indian	3,146	0.3
Other nonwhite	19,205	2.0
White Spanish	69,011	7.3
Black Spanish	21,143	2.2
Unknown	24,242	2.6
Unreported	19,369	2.1
	Years of education	
All groups	941,396	100.0
Less than 8	69,375	7.4
8	50,946	5.4
9 to 11	174,306	18.5
12	367,335	39.0
13 to 15	134,238	14.3
16 and over	92,791	9.9
Unreported	52,405	5.6

Table 27. (continued)

Characteristics	Number	Percent of total
	Occupational group	
All occupations	941,396	100.0
Professional	62,342	6.6
Technical	17,398	1.8
Managerial	31,483	3.3
Clerical	127,999	13.6
Sales	33,640	3.6
Blue collar	543,750	57.8
Farming, forestry, fishery	2,974	0.3
Service (except household)	91,634	9.7
Private household service	4,149	0.4
Unknown/unreported	26,027	2.8
	Industry of last employment	
All industries	941,396	100.0
Manufacturing	358,827	38.1
Durable goods	163,876	17.4
Nondurable goods	194,951	20.7
Nonmanufacturing	498,581	53.0
Agriculture and related	10,125	1.1
Mining	2,046	0.2
Construction	88,468	9.4
Transportation, utilities	42,727	4.5
Trade	158,800	16.9
Wholesale	53,877	5.7
Retail	104,923	11.1
Finance, insurance and real estate	33,484	3.6
Services	162,931	17.3
Government	47,775	5.1
Unknown/unreported	36,213	3.8

NOTE: Data relate to beneficiaries in Regular Programs (first 26 weeks of unemployment insurance compensation).

OCCUPATIONAL SUPPLY AND DEMAND

This section contains information on statewide supply and demand for workers, by occupation, during fiscal year 1982 (October 1, 1981 to September 30, 1982). Also included are: occupational projections through 1985; a list of the top 100 occupations in the state with typical training times; and a list showing titles of emerging occupations within the U.S. economy.

Applicants and Openings

Labor supply and demand statistics were derived from fiscal year 1982 data compiled by the New York State Labor Department's Job Service Division. Demand is depicted by the volume of job openings received during the period, while the supply of workers is reflected by counts of individual job applicants. Although considerable in scope and detail, the data represent only the experience of the Job Service in serving the labor market. This information does not indicate all activity in the labor market nor does it comprise a perfectly representative sample of the marketplace. (Some applicant groups, such as women, and some employer groups, such as those operating under provisions of government contracts, tend to be more heavily represented in Job Service statistics.) In the absence of more comprehensive coverage of all labor market transactions, however, Job Service data provide valuable clues to supply and demand conditions existing in a wide range of occupations in this state. The reader who requires more extensive information should utilize other sources, such as: the output of training programs; reports on labor market conditions in particular industries where some occupations predominate; counts of the volume and variety of classified advertising for employment openings; and the informed opinions of local educators, employers, planners, and Job Service personnel.

Overview. During fiscal year 1982, there were 970,464 job applicants available at New York State Job Service offices; 637,224 job openings were received over the same time period. These data include statistics for short-term openings peculiar to a few occupations, for example, private duty nurses and substitute teachers. The Job Service maintains registries for these occupations; available workers are matched with short-term openings (usually 3 days or less). An applicant who might not be available for a full-time permanent job could fill many short-term openings during the year.

In FY 1982, for example, 123,206 applicants were available for work in the professional, technical and managerial group and 400,152 openings were received --almost 3¼ jobs for each applicant. Deletion of the short-term openings and registries, however, yielded 94,005 applicants and 17,309 openings, or almost 5½ persons available for each job opening.

To provide planners with more meaningful data, statistics related primarily to the nurses' and teachers' registries--in all, 105,450 applicants and 418,747 job openings--have been deleted from both the narrative and tables in this section.

According to the adjusted statistics, total applicants available for jobs in FY 1982 numbered 865,014. The largest applicant category was clerical and sales (267,384), followed by service (156,960) occupations.

Adjusted job openings received in fiscal year 1982 numbered 218,477. By far the largest number of openings were for clerical and sales workers (77,637) followed by service workers (54,700).

Job Service data yielded an average applicants-to-openings (A/O) ratio of 4.0 for all occupations during fiscal year 1982. This ratio, defined as the number of applicants registered divided by the number of openings received, is used to describe occupational demand and supply. Ratios for specific occupations or occupational groupings are compared with the average for all occupations to determine the job outlook. A high A/O ratio indicates a likely applicant oversupply and less favorable prospects for employment in that occupation. A low A/O ratio shows that demand and supply are in better balance and employment prospects are more favorable. Of all major occupational categories, agricultural, fishery, forestry and related occupations had the lowest A/O ratio. Processing, service, benchwork, and clerical and sales occupational groups also had A/O ratios less than the 4.0 average for all occupations. The structural work occupational group had the highest A/O ratio. A listing of A/O ratios, by occupational category, is found in Table 30.

Applicants had the greatest likelihood of getting a job in the agricultural, fishery, forestry and related category (28.1 percent) and the processing category (22.3 percent): measured by applicants placed divided by applicants registered, expressed as a percent. Applicants in the professional, technical and managerial category had the least likelihood of getting a job (1.7 percent).

The percentage of job openings filled averaged 74.4 for all occupations, but ranged from a high of 81.4 percent for the miscellaneous category to a low of 54.5 percent for the machine trades classification. Tables 28 and 29 show the volume and distribution of job applicants and openings, by occupational category, during fiscal year 1982. The various ratios suggest the extent to which supply balanced demand.

Table 28. JOB SERVICE APPLICANTS AND OPENINGS BY OCCUPATIONAL CATEGORY
NEW YORK STATE, FISCAL YEAR 1982
(October 1, 1981 - September 30, 1982)

Occupational code and title		Applicants			Job openings	
		Registered	Placed	Active e.o.p.	Received	Filled
	Total	865,014	103,465	424,635	218,477	162,451
0,1	Professional, technical and managerial	94,005	1,597	44,650	17,309	12,062
2	Clerical and sales	267,384	44,647	110,291	77,637	57,802
3	Service	156,960	26,818	74,683	54,700	44,174
4	Agricultural, fishery, forestry and related	12,524	3,516	4,592	6,207	4,994
5	Processing	17,205	3,833	7,625	5,103	3,950
6	Machine trades	52,522	4,620	25,220	8,952	4,881
7	Benchwork	69,138	10,152	34,784	18,425	11,893
8	Structural work	72,602	5,896	35,778	10,011	6,315
9	Miscellaneous	93,285	9,544	50,460	20,133	16,380

NOTE: Detail data for applicants registered or active e.o.p. (end of period) is less than the total because the latter includes partially registered applicants not assigned to an occupational group. Detail data for applicants placed exceeds total placed because an applicant may be placed in more than one occupational group during the period.

Table 29. PERCENT DISTRIBUTION OF JOB SERVICE APPLICANTS AND OPENINGS BY OCCUPATIONAL CATEGORY
NEW YORK STATE, FISCAL YEAR 1982
(October 1, 1981 - September 30, 1982)

Occupational code and title		Applicants			Job openings	
		Registered	Placed	Active e.o.p.	Received	Filled
	Total	100.0	100.0	100.0	100.0	100.0
0,1	Professional, technical and managerial	10.9	1.5	10.5	7.9	7.4
2	Clerical and sales	30.9	43.2	26.0	35.5	35.6
3	Service	18.1	25.9	17.6	25.0	27.2
4	Agricultural, fishery, forestry and related	1.4	3.4	1.1	2.8	3.1
5	Processing	2.0	3.7	1.8	2.3	2.4
6	Machine trades	6.1	4.5	5.9	4.1	3.0
7	Benchwork	8.0	9.8	8.2	8.4	7.3
8	Structural work	8.4	5.7	8.4	4.6	3.9
9	Miscellaneous	10.8	9.2	11.9	9.2	10.1

NOTE: Detail data for applicants registered or active e.o.p. (end of period) is less than total because the total includes partially registered applicants not assigned to an occupational group. Detail data for applicants placed exceeds total placed because an applicant may be placed in more than one occupational group during the period.

Table 30. RATIOS: APPLICANTS TO OPENINGS, APPLICANTS PLACED TO APPLICANTS REGISTERED (PERCENT), AND OPENINGS FILLED TO OPENINGS RECEIVED (PERCENT), BY OCCUPATIONAL CATEGORY
NEW YORK STATE, FISCAL YEAR 1982
(October 1, 1981 - September 30, 1982)

Occupational code and title		Ratio of applicants registered to openings received	Percent	
			Applicants placed of applicants registered	Openings filled of openings received
	Total	4.0	12.0	74.4
0,1	Professional, technical and managerial	5.4	1.7	69.7
2	Clerical and sales	3.4	16.7	74.5
3	Service	2.9	17.1	80.8
4	Agricultural, fishery, forestry and related	2.0	28.1	80.5
5	Processing	3.4	22.3	77.4
6	Machine trades	5.9	8.8	54.5
7	Benchwork	3.8	14.7	64.5
8	Structural work	7.3	8.1	63.1
9	Miscellaneous	4.6	10.2	81.4

Labor Supply and Demand. Data from the Employment Security Automated Reporting System (ESARS) of the New York State Job Service form the largest available file on applicants and job openings in the state's labor market. The following analysis is based on ESARS statistics--job openings received, job applicants registered, and jobs filled during fiscal year 1982 (October 1, 1981 - September 30, 1982). Tables 31 through 34 make use of the nine-digit occupational code based on the fourth edition of the Dictionary of Occupational Titles (DOT), published in 1977.

Although the discussion here is centered on statewide Job Service data, the job market for many occupations is not a statewide market nor are job applicants and openings distributed evenly throughout the state. A statewide market implies job mobility, that is, job applicants are presumed willing to relocate within the state for employment. However, many opportunities are not attractive enough to induce workers to relocate; such jobs are therefore limited to the labor supply of a local labor market or sub-area. In all, 202 occupations with a minimum of 600 applicants available or with 450 job openings received during the year were selected for review; fewer applicants or openings, in the context of a statewide labor market, were considered impractical for analysis.

Of the 202 occupations studied, just over a third (75) averaged 4.0 or fewer applicants for each job opening. Of these occupations (listed in Table 31), 32.0 percent were in the services group and 28.0 percent in the clerical and sales category. One occupation--Electrician--has been identified as an apprenticeable occupation with a significant level of employment in at least one high technology industry.

Table 31. OCCUPATIONS WITH LOWEST RATIO OF JOB APPLICANTS TO JOB OPENINGS NEW YORK STATE FISCAL YEAR 1982

Occupational code [a] and title		Ratio
	Below 0.6	
075.124-010	Nurse, school	0.3
153.267-018	Umpire	0.2
202.362-014	Stenographer	0.3
301.687-010	Caretaker	0.4
363.682-014	Presser, all around	0.5
363.682-018	Presser, machine	0.4
388.663-010	Elevator operator	0.6
402.687-010	Farmworker, vegetable	0.5
403.687-010	Farmworker, fruit	0.6
651.682-014	Offset-duplicating machine operator	0.3
905.687-010	Truckdriver helper	0.4
	0.7 - 1.0	
199.267-018	Examination proctor	0.8
211.582-010	Food tabulator, cafeteria	0.9
249.367-074	Teacher aide II	0.7
279.357-046	Salesperson, flying squad	0.9
301.687-018	Yard worker	0.9
309.677-010	Companion	0.7
311.477-026	Waiter/waitress, formal	0.8
311.677-018	Dining room attendant	1.0
341.665-010	Ski-tow operator	0.9
402.687-014	Harvest worker, vegetable	0.7
529.686-014	Cannery worker	1.0
785.361-018	Sample stitcher	1.0
	1.1 - 2.5	
099.227-034	Tutor	1.2
099.327-010	Teacher aide I	1.2
195.227-014	Recreation leader	1.9
203.582-066	Typist	1.4
230.667-010	Deliverer, outside	2.1
238.362-010	Hotel clerk	2.0
249.367-046	Library assistant	1.3
249.367-054	Order clerk	2.5
279.357-050	Salesperson, general hardware	1.4
279.357-054	Salesperson, general merchandise	1.9
299.357-014	Telephone solicitor	1.3
299.477-010	Deliverer, merchandise	2.5
301.474-010	Houseworker, general	2.4
311.477-014	Counter attendant, lunchroom or coffee shop	2.4
311.677-014	Counter attendant, cafeteria	2.2
317.684-014	Pantry goods maker	2.4
318.687-010	Kitchen helper	2.5
323.687-014	Cleaner, housekeeping	2.0

Table 31. (continued)

Occupational code [a]	and title	Ratio
	1.1 - 2.5 (continued)	
323.687-018	Housecleaner	1.8
355.377-014	Psychiatric aide	1.3
406.684-014	Groundskeeper, industrial-commercial	2.5
529.686-070	Production helper	1.5
700.687-058	Polisher	1.8
786.682-170	Lockstitch-machine operator	2.3
786.682-174	Lockstitch-sewing-machine operator, complete garment	1.1
786.682-194	Overlock sewing machine operator	1.8
	2.6 - 4.0	
092.227-018	Teacher, preschool	2.8
142.061-014	Cloth designer	4.0
209.562-010	Clerk, general	2.9
211.362-018	Teller	3.0
222.387-058	Stock clerk	3.2
235.662-022	Telephone operator	3.5
239.567-010	Office helper	3.9
261.357-066	Salesperson, women's apparel and accessories	3.5
290.477-014	Sales clerk	3.6
290.477-018	Sales clerk, food	2.9
311.477-018	Waiter/waitress, bar	2.6
311.677-010	Cafeteria attendant	3.5
313.361-014	Cook	3.5
317.687-010	Cook helper	3.8
363.684-018	Presser, hand	2.6
372.667-034	Guard, security	3.2
381.687-018	Cleaner, industrial	3.9
408.687-014	Laborer, landscape	2.8
410.684-010	Farmworker, dairy	3.6
556.685-038	Inspection-molding-machine tender	3.3
651.482-010	Offset-press operator	3.2
726.684-018	Electronics assembler	3.5
769.687-054	Woodworking-shop hand	2.8
807.381-010	Automobile-body repairer	3.7
824.261-010	Electrician	3.7
862.381-030	Plumber	3.1

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

If many applicants are competing for the available jobs in certain occupations, these occupations will have very high A/O ratios. From the standpoint of the jobseeker such occupations offer unfavorable employment prospects. The high ratios are attributable to several factors. Among these are structural problems in the labor market: the types of job skills available and the demand for those skills may be drastically out-of-phase for a variety of reasons, ranging from differing geographic dispersions of supply and demand to rapid technological changes in fields where insufficient numbers of people are being trained or retrained. A second factor behind the supply-demand imbalances shown here results from the special nature of Job Service statistics: the data do not represent the universe of labor market transactions and some job applicants or employer openings may be over- or under-represented. Lastly, job applicants who are assigned an occupational code and job title may have experience that does not precisely match the hiring requirements of a particular employer.

Of the 202 occupations reviewed, 127 with the highest A/O ratios are shown in Table 32. These occupations are listed in ascending numerical order, by occupational code. Four of these occupations--Injection molding-machine operator, Drafter, Electrical and electronic technician, and Inspector--have been identified as being apprenticeable occupations with a significant level of employment in at least one high technology industry. High technology industries are expected to experience significant growth during the 1980's. Therefore, even though these occupations had high applicants-to-openings ratios in fiscal year 1982, this does not mean they are not worth pursuing for the future.

Table 32. OCCUPATIONS WITH HIGHEST RATIO OF JOB APPLICANTS TO JOB OPENINGS NEW YORK STATE FISCAL YEAR 1982

Occupational code [a] and title		Ratio
001.261-010	Drafter, architectural	4.4
003.161-014	Electronics technician	5.9
007.061.014	Mechanical engineer	9.1
007.281-010	Drafter, mechanical	6.2
020.162-014	Programmer, business	11.8
045.107-010	Counselor	8.0
075.374-010	Nurse, general duty	4.5
079.367-010	Medical assistant	16.4
079.371-010	Dental assistant	7.0
090.227-010	Faculty member, college or university	4.2
141.061-018	Graphic designer	9.7
142.061-018	Clothes designer	19.8
160.167-010	Accountant	14.8
162.157-038	Purchasing agent	23.7
163.167-018	Manager, sales	44.6
165.067-010	Public relations representative	29.8
166.267-010	Employment interviewer	8.7
169.167-010	Administrative assistant	23.1
169.167-034	Manager, office	20.7
183.117-014	Production superintendent	20.8

Table 32. (continued)

Occupational code [a]	and title	Ratio
185.167-046	Manager, retail store	15.3
186.117-014	Controller	29.7
187.167-106	Manager, food service	11.6
189.167-018	Management trainee	16.9
195.107-010	Caseworker	7.1
195.167-010	Community organization worker	12.9
195.367-010	Case aide	10.1
201.362-010	Legal secretary	4.6
201.362-014	Medical secretary	9.7
201.362-030	Secretary	4.4
203.362-010	Clerk typist	4.5
203.582-030	Keypunch operator	7.9
203.582-054	Terminal operator	7.7
206.362-010	File clerk I	6.9
206.367-014	File clerk II	9.3
209.567-600	Clerk, general II	5.6
209.587-026	Mail clerk	4.2
210.382-014	Bookkeeper I	5.8
210.382-018	Bookkeeper II	5.5
211.362-010	Cashier I	4.9
211.462-014	Cashier-checker	4.3
211.462-018	Cashier-wrapper	4.6
213.362-010	Computer operator	5.7
215.482-010	Payroll clerk	7.2
216.482-010	Accounting clerk	7.7
219.362-010	Administrative clerk	4.4
222.137-030	Shipping and receiving supervisor	10.1
222.387-050	Shipping and receiving clerk	4.7
237.367-038	Receptionist	5.2
261.357-038	Sales representative, women's and girls' apparel	38.0
261.357-050	Salesperson, men's and boys' clothing	8.3
261.357-062	Salesperson, shoes	5.6
279.357-014	Sales representative, general merchandise	14.8
292.353-010	Driver, sales route	5.1
299.137-010	Manager, department	21.4
299.367-014	Stock clerk, self-service store	4.4
301.137-010	Housekeeper, home	7.7
301.677-010	Child monitor	6.6
311.477-030	Waiter/waitress, informal	4.9
312.474-010	Bartender	4.4
313.361-022	Cook, short order I	4.3
313.671-010	Cook, short order II	7.2
315.361-010	Cook	5.1
316.684-018	Meat cutter	11.3
321.137-010	Housekeeper	4.4
323.687-010	Cleaner, hospital	6.5
332.271-010	Cosmetologist	21.0
354.377-014	Home attendant	7.7
355.674-010	Child-care attendant, school	10.4
355.674-014	Nurse aide	5.5
355.674-018	Orderly	5.6
355.677-010	Food-service worker, hospital	4.1
359.677-010	Attendant, children's institution	8.7

Table 32. (continued)

Occupational code [a]	and title	Ratio
359.677-018	Nursery school attendant	5.7
372.667-038	Merchant patroller	4.3
381.687-010	Central supply worker	5.9
381.687-014	Cleaner, commercial or institutional	4.1
382.664-010	Janitor	7.6
406.687-010	Groundskeeper, parks and grounds	5.5
509.686-010	Laborer, general	10.6
519.687-022	Foundry worker, general	12.8
556.382-014	Injection-molding machine operator	4.6
600.280-022	Machinist	6.1
600.380-018	Machine set-up operator	8.6
609.684-010	Inspector, general	47.3
609.685-018	Production-machine tender	11.8
616.360-018	Machine operator I	13.3
617.685-026	Power-press tender	8.0
619.685-062	Machine operator II	13.7
620.261-010	Automobile mechanic	5.3
620.684-014	Automobile mechanic helper	12.8
625.281-010	Diesel mechanic	6.8
638.281-014	Maintenance mechanic	5.7
706.684-022	Assembler, small parts	6.0
706.687-010	Assembler, production	5.6
739.687-030	Assembler, small products	5.7
741.684-026	Painter, spray I	4.4
780.684-062	Fabricator, foam rubber	6.6
781.687-070	Trimmer, hand	20.7
787.682-046	Sewing-machine operator	4.7
789.687-046	Final assembler	6.8
806.684-010	Assembler, automobile	845.5
810.384-014	Welder, arc	6.4
819.384-010	Welder, combination	14.3
828.281-010	Electronics mechanic	8.2
829.684-022	Electrician helper	9.3
840.381-010	Painter	5.0
859.683-010	Operating engineer	13.4
860.381-022	Carpenter	4.7
860.381-042	Carpenter, rough	10.3
866.381-010	Roofer	4.4
869.664-014	Construction worker I	8.8
869.684-046	Roustabout	8,119.0
869.687-026	Construction worker II	7.2
899.381-010	Maintenance repairer, building	5.8
904.383-010	Tractor-trailer-truck driver	11.0
905.663-014	Truck driver, heavy	7.7
906.683-022	Truck driver, light	4.4
913.463-010	Bus driver	4.4
913.463-018	Taxi driver	12.5

Table 32. (continued)

Occupational code [a] and title		Ratio
915.467-010	Automobile-service-station attendant	4.8
920.587-010	Cloth-bolt bander	39.7
920.587-018	Packager, hand	10.5
920.685-078	Packager, machine	8.2
921.683-050	Industrial-truck operator	20.0
922.687-058	Laborer, stores	4.1
929.687-010	Cutter, banana room	10.3

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

Occupations with substantial demand. During fiscal year 1982, the Job Service received large numbers of job openings in certain occupations. In all, 46 occupations had 1,000 or more job openings during the year. About one-third of these occupations were included in the clerical and sales group. Table 33 lists those occupations for which substantial numbers of job openings were registered with the Job Service.

Table 33. OCCUPATIONS WITH A SUBSTANTIAL NUMBER OF OPENINGS
NEW YORK STATE
FISCAL YEAR 1982

Occupational code [a] and title		Job Service openings received
	5,000+	
202.362-014	Stenographer	6,078
209.562-010	Clerk, general	13,781
381.687-014	Cleaner, commercial or institutional	5,084
905.687-010	Truck driver helper	6,059
	2,000-4,999	
099.327-010	Teacher aide	2,003
201.362-030	Secretary	3,179
203.362-010	Clerk-typist	4,278
203.582-066	Typist	2,052
211.462-014	Cashier-checker	2,359
213.582-010	Food tabulator	2,072
219.362-010	Administrative clerk	2,733
222.387-058	Stock clerk	2,506
249.367-074	Teacher Aide II	3,189
279.357-054	Salesperson, general merchandise	3,620
301.474-010	Houseworker, general	2,106
311.477-014	Counter attendant, lunchroom or coffee shop	2,240
311.477-026	Waiter/waitress, formal	3,489
318.687-010	Kitchen helper	4,025
323.687-014	Cleaner, housekeeper	2,237
355.674-014	Nurse aide	2,111
363.682-018	Presser, machine	3,379
372.667-034	Guard, security	2,645
529.686-014	Cannery worker	2,053
920.587-018	Packager, hand	2,865
922.687-058	Laborer, stores	2,465

Table 33. (continued)

Occupational code [a] and title		Job Service openings received
	1,000-1,999	
209.567-600	Clerk, general II	1,661
222.387-050	Shipping and receiving clerk	1,508
230.667-010	Deliverer, outside	1,600
237.367-038	Receptionist	1,420
279.357-046	Salesperson, flying squad	1,098
290.477-014	Sales clerk	1,397
301.687-010	Caretaker	1,802
311.477-030	Waiter/waitress, informal	1,779
311.677-014	Counter attendant, cafeteria	1,326
311.677-018	Dining room attendant	1,878
313.361-014	Cook, hotel and restaurant	1,379
355.377-014	Psychiatric aide	1,320
402.687-010	Farmworker II, vegetable	1,359
620.261-010	Automobile mechanic	1,128
651.682-014	Offset-duplicating machine operator	1,228
726.684-018	Electronics assembler	1,113
785.361-018	Sample stitcher	1,095
786.682-170	Lockstitch-machine operator	1,652
869.687-026	Construction worker II	1,084
899.381-010	Maintenance repairer, building	1,048
906.683-022	Truck driver, light	1,779

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

Occupations with substantial supply. The Job Service recorded 51 occupations with 3,000 or more applicants in fiscal year 1982. Almost 20 percent of these occupations, characterized by a substantial number of job applicants, had 10,000 or more during the year (see Table 34).

Table 34. OCCUPATIONS WITH A SUBSTANTIAL NUMBER OF APPLICANTS
NEW YORK STATE
FISCAL YEAR 1982

Occupational code [a] and title		Job Service applicants registered
	10,000+	
201.362-030	Secretary	13,905
203.362-010	Clerk-typist	19,103
209.562-010	Clerk, general	39,435
211.462-014	Cashier-checker	10,180
219.362-010	Administrative clerk	11,962
318.687-010	Kitchen helper	10,258
355.674-014	Nurse aide	11,640
381.687-014	Cleaner, commercial or institutional	21,024
920.587-018	Packager, hand	30,170
922.687-058	Laborer, stores	10,036

Table 34. (continued)

Occupational code [a]	and title	Job Service applicants registered
	5,000-9,999	
209.567-600	Clerk, general II	9,334
210.382-014	Bookkeeper I	5,211
216.482-010	Accounting clerk	5,616
222.387-050	Shipping and receiving clerk	7,104
222.387-058	Stock clerk	8,026
237.367-038	Receptionist	7,418
279.357-054	Salesperson, general merchandise	6,776
290.477-014	Sales clerk	5,031
311.477-014	Counter attendant, lunchroom or coffee shop	5,458
311.477-030	Waiter/waitress, informal	8,639
354.377-014	Home attendant	6,888
372.667-034	Guard, security	8,548
620.261-010	Automobile mechanic	6,014
789.687-046	Final assembler	6,461
869.664-014	Construction worker I	8,128
869.684-046	Roustabout	8,119
869.687-026	Construction worker II	7,787
899.381-010	Maintenance repairer, building	6,056
905.663-014	Truck driver, heavy	5,429
906.683-022	Truck driver, light	8,262
	3,000-4,999	
160.167-010	Accountant	3,462
169.167-010	Administrative assistant	3,878
185.167-046	Manager, retail store	4,202
189.167-018	Management trainee	3,570
206.362-010	File clerk I	3,211
210.382-018	Bookkeeper II	4,975
230.667-010	Deliverer, outside	3,505
301.474-010	Houseworker, general	4,953
312.474-010	Bartender	3,197
313.361-014	Cook, hotel and restaurant	4,838
313.361-022	Cook, short order I	3,505
323.687-014	Cleaner, housekeeping	4,428
609.685-018	Production-machine tender	3,319
706.684-022	Assembler, small parts	3,414
706.687-010	Assembler, production	3,992
726.684-018	Electronics assembler	3,857
739.687-030	Assembler, small products	3,177
786.682-170	Lockstitch-machine operator	3,868
860.381-022	Carpenter	3,806
904.383-010	Tractor-trailer-truck driver	4,164
921.683-050	Industrial-truck operator	3,944

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

Occupational Projections

Periodically, the New York State Department of Labor prepares long-term occupational projections for the state, its metropolitan areas, and vocational education regions. Estimates are made of average annual job openings within occupational groups and individual occupations throughout the forecast period.

These job openings are further subdivided into four categories--openings expected to occur because of: 1) employment growth, 2) separations from the labor force (e.g., retirement), 3) occupational transfers (workers changing occupations), and 4) geographic transfers (workers moving out of the area). Statistics indicate that estimated job openings resulting from geographic transfers exceed those resulting from labor force separations and employment growth.

Through 1985, an estimated 765,000 openings will be available annually, of which 45.2 percent will be generated as a result of occupational transfers, and 39.3 percent as a result of labor force separations (see Table 35). The balance of job openings will be due to growth and geographic transfers. White-collar occupations will offer by far the best chances for employment, with 483,000 openings (63.1 percent of the total) expected annually. Blue-collar occupations, on the other hand, will provide only 171,000 annual openings. Blue-collar occupations in general, and more specifically the factory operatives classification, will manifest negative growth through 1985 (-1.4 percent of total annual openings will be due to growth). Openings in service occupations will number 102,000 annually.

Through 1985, New York State's labor force will continue to shift toward white-collar and service occupations. Total employment is projected to increase by 367,000 from 1974 to 1985, with white-collar jobs accounting for 87 percent of the gain. All four major white-collar categories are expected to grow; the professional and technical, and clerical groups will show above-average growth rates. Despite the expected growth in white-collar jobs, however, professional and technical, and managers and officials groups (occupations in which a college degree is normally a prerequisite) will account for only an additional 0.5 percent of all employment in 1985. This amount will be a minor increase from the base-year 1974 proportion of 28.0 percent. Major occupational groups whose rates of growth will significantly exceed that of overall employment in New York State are service workers and clerical workers.

Chart 1 presents the distribution of annual job openings due to growth, separations, and geographic and occupational transfers by occupational classification (i.e., white collar, blue collar, service).

Although total blue-collar employment is expected to decline by 1.2 percent, two of the three major blue-collar groups--crafts workers and laborers--should increase. The expected decline through 1985 in factory operatives employment should be much smaller than the sharp reduction which occurred in manufacturing employment from 1969 to 1974. Laborers will fare better than operatives because a greater proportion of laborers are employed in industries where growth is expected--construction, trade, services, transportation and utilities, and public administration.

Chart 1. DISTRIBUTION OF ANNUAL JOB OPENINGS DUE TO GROWTH, SEPARATIONS, AND GEOGRAPHICAL AND OCCUPATIONAL TRANSFERS BY OCCUPATIONAL CLASSIFICATION

NEW YORK STATE

1974-1985

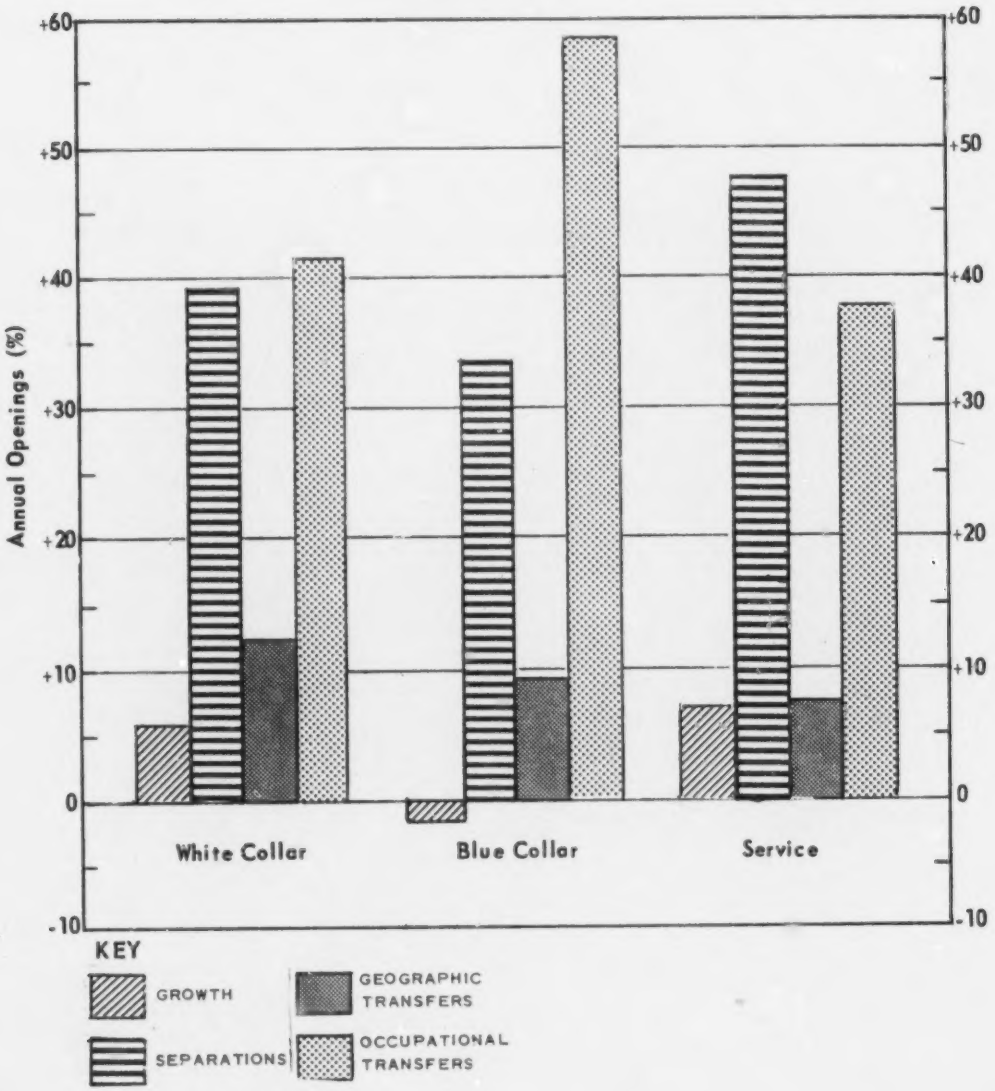

Table 35 outlines 1974 and projected 1985 employment levels and percent distributions within the nine major occupational groups. The table also includes total average annual openings, by occupational group, and the percent distributions of openings, by reason, for each group.

Job openings for more specific occupational groups are presented in Table A-2.

The 100 occupations forecasted to provide the best opportunities for employment through 1985 are not confined to a particular occupational category. The list, a composite rank based on average annual openings, openings as a percent of 1977 employment, and employment change from 1974-1985, is shown in Table 36. Three of the occupations in this list--Drafter, Electrician, and Inspector--have been identified as apprenticeable occupations with a significant level of employment in at least one high technology industry. Electrician is also on the list of occupations that had low applicants to openings ratios in fiscal year 1982.

Table 35. AVERAGE ANNUAL JOB OPENINGS
BY MAJOR OCCUPATIONAL GROUP AND REASON
NEW YORK STATE, 1974-1985

Major occupational group	Employment				Total average annual openings (000's) 1974-1985	Percent distribution of openings by reason			
	1974 (000's)	Percent distribution	1985 (000's)	Percent distribution		Growth	Separations	Geographic transfers	Occupational transfers
Total	7,448	100.0	7,815	100.0	765	4.4	39.3	11.0	45.2
White-collar workers	4,197	56.3	4,517	57.8	483	6.0	39.6	12.6	41.8
Professional, technical and kindred	1,256	16.9	1,364	17.5	134	7.3	35.7	18.1	38.8
Managers, officials and proprietors	828	11.1	862	11.0	84	3.7	33.1	16.7	46.5
Sales workers	497	6.7	514	6.6	55	2.8	37.6	11.0	48.6
Clerical and kindred	1,616	21.7	1,777	22.7	210	7.0	45.1	8.0	40.0
Blue-collar workers	2,162	29.0	2,136	27.3	171	-1.4	33.8	9.1	58.5
Craft and kindred	870	11.7	902	11.5	65	4.5	30.7	12.3	52.6
Operatives	998	13.4	934	12.0	77	-7.6	40.8	6.9	59.9
Laborers, except farm	294	3.9	300	3.8	29	1.9	22.3	7.6	68.2
Service workers	995	13.4	1,077	13.8	102	7.2	47.6	7.4	37.7
Farmers and farm workers	95	1.3	87	1.1	9	-8.6	38.7	4.8	65.2

Table 36. TOP 100 PROJECTED OCCUPATIONS IN ORDER OF COMPOSITE RANK
NEW YORK STATE
1974-1985

Rank	Occupation	Typical Training Time[a]
1	Miscellaneous clerical workers, n.e.c.	3-6 months
2	Practical nurses	1-2 years
3	Nursing aides, orderlies, and attendants	3-6 months
4	Secretaries, except medical and legal	1-2 years
5	Secretaries, legal	1-2 years
6	Bank tellers	6 months-1 year
7	Receptionists	6 months-1 year
8	Typists	1-2 years
9	Building interior cleaners, n.e.c.	Short demonstration-1 month
10	Health aides, exc. nursing	1-2 years
11	Child care workers, exc. private household	Short demonstration-1 month
12	Cashiers	Short demonstration-1 month
13	Secretaries, medical	1-2 years
14	Cooks, exc. private household	2-4 years
15	Billing clerks	3-6 months
16	Waiters	1-3 months
17	Dental assistants	1-2 years
18.5	Sales managers and department heads retail trade	2-4 years
18.5	Lodging quarters cleaners, exc. private household	Short demonstration-1 month
20	Clerical supervisors, n.e.c.	2-4 years
21.5	Dental hygienists	1-2 years
21.5	Estimators and investigators, n.e.c.	3-6 months
23	Hairdressers and cosmetologists	1-2 years
24.5	Sales representatives, and sales workers, n.e.c.	1 month-1 year
24.5	Gardeners and groundskeepers, exc. farm	1-3 months
26	Excavating, grading, and road machine operators; exc. bulldozer	6 months-1 year
27	Other health technologists and technicians	6 months-1 year
28.5	Clinical laboratory technologists and technicians	2-4 years
28.5	Counter clerks, exc. food	3-6 months
30.5	Police and detectives	3-6 months
30.5	Payroll and timekeeping clerks	6 months-1 year
32	Bookkeepers	1-2 years
33	Teacher aides, exc. school monitors	Short demonstration-1 month
34	Checkers, examiners, and inspectors, mfg.	1-3 months
35	Flight attendants	1-3 months
36.5	Janitors and sextons	Short demonstration-1 month
36.5	Managers and superintendents, building	1-2 years
38	Food counter and fountain workers	1-3 months
39	Assemblers	Short demonstration-1 month

Table 36. (continued)

Rank	Occupation	Typical Training Time[a/]
40	Animal caretakers, exc. farm	3-6 months
41	File clerks	1-3 months
42	Welfare service aides	2-4 years
43	Mail handlers, exc. post office	Short demonstration-1 month
44	Blue-collar worker supervisors, n.e.c.	2-4 years
45.5	Stock clerks and store keepers	Short demonstration-1 month
45.5	Food service workers, n.e.c., exc. private household	1-3 months
47.5	Guards	1-3 months
47.5	Plumbers and pipefitters, and apprentices	2-4 years
49.5	Carpenters and apprentices	4-10 years
49.5	Bartenders	Short demonstration-1 month
51	Radiological technologists and technicians	6 months-1 year
52	Auto mechanics and apprentices	2-4 years
53	Air conditioning, heating, and refrigeration mechanics and repairers	4-10 years
54	Statistical clerks	3-6 months
55	Opticians, and lens grinders and polishers	1-2 years
56	Drafters	2-4 years
57	Telephone operators	3-6 months
58	Engineering and science technicians	1-2 years
59	Garbage collectors	Short demonstration
60	Inspectors, exc. construction, public admin.	1-2 years
61	Electricians and apprentices	2-4 years
62	Health record technologists and technicians	1-2 years
63	Library attendants and assistants	3-6 months
64	Computer and peripheral equipment operators	1-2 years
65	Meat wrappers, retail trade	Short demonstration-1 month
66	Technicians, n.e.c.	6 months-1 year
67	Sewers and stitchers	3-6 months
68	Radio and television repairers	1-2 years
69	Bulldozer operators	6 months-1 year
70	Farm laborers, unpaid family workers	6 months-1 year
71	Purchasing agents and buyers, n.e.c.	2-4 years
72	Stock handlers	Short demonstration-1 month
74	Farmers (owners and tenants)	2-4 years
74	Hucksters and peddlers	Short demonstration-1 month
74	Boilermakers	2-4 years
76	Operatives, n.e.c.	Short demonstration-2 years
77	Packers and wrappers, exc. meat and produce	Short demonstration-1 month
78	Data processing machine repairers	2-4 years
79	Farm managers	2-4 years

Table 36. (continued)

Rank	Occupation	Typical Training Time[a]
80.5	Welders and flame cutters	1-2 years
80.5	Attendants, recreation and amusement	Short demonstration-1 month
82	Office machine repairers	2-4 years
83.5	Expediters and production controllers	1-2 years
83.5	School monitors	Short demonstration-1 month
85	Shipping and receiving clerks	1-3 months
86	Dispatchers and starters, vehicle	6 months-1 year
87	Collectors, bill and account	3-6 months
88	Household appliance and accessory installers and mechanics	3-6 months
89	Demonstrators	1-3 months
90	Crossing guards and bridge tenders	3-6 months
91	Insurance agents, brokers, and underwriters	1-2 years
92	Truck drivers	1-3 months
94	Sheriffs and bailiffs	3-6 months
94	Heavy equipment mechanics, incl. Diesel	2-4 years
94	Ticket station and express agents	6 months-1 year
96.5	Delivery and route workers	6 months-1 year
96.5	Construction laborers, exc. carpenter's helpers	6 months-1 year
98.5	Surveyors	2-4 years
98.5	Winding operatives, n.e.c.	1-3 months
100	Machine operatives, misc. specified	Short demonstration-1 month

n.e.c. - not elsewhere classified.

a. Many of the specific tasks within these occupations may require significantly more (or less) training time. Training times listed include classroom, on-the-job, or essential experience in less responsible jobs. Not included is the orientation time needed by every worker who starts a new job.

The Bureau of Labor Statistics, U.S. Department of Labor, has recently released Comparing Occupations: Four Measures. This report ranks 177 occupations according to the number of workers already in the occupation, the rate at which it is growing, unemployment rate for the occupation, and usual weekly earnings. The report includes jobs for persons with no work experience beyond high school; jobs that require varying amounts of work experience or specialized postsecondary training, including apprenticeship; and jobs that usually require four or more years of college.

Listed below are 10 occupations with the highest projected employment change from 1980 to 1990 which usually require less than four years of college. A significant limitation of the data is that the ranking system utilizes national averages, and may differ significantly from the experience of individual workers.

- Professional nurse
- Data processing machine mechanic
- Computer and peripheral equipment operator
- Office machine and cash register servicer
- Dental hygienist
- Claims examiner
- Brickmason
- Manual arts, music, and recreation therapist
- Nurse aide and orderly
- Surgical technician
- Dental assistant

Emerging Occupations

The Dictionary of Occupational Titles, Fourth Edition (1977), is the world's most detailed job reference, containing descriptions of over 17,000 distinct occupations in the American economy. Since its publication, Occupational Analysis Field Centers have identified numerous additional titles of emerging occupations. Although many of these new occupations may not currently have a large number of openings, employment and training planners should be aware of their existence for two reasons: these occupations often indicate the direction of occupational growth in our society; and existing occupational training programs may need to be modified to include the skills represented by these new occupations. The following list presents some of these newly identified occupations. Users who need amplified descriptions of these job titles are encouraged to contact their local Job Service office or the authors of this report.

Occupational code [a/]	and title
512.382-620	Desulfurizing-equipment controller (iron and steel). Operates and controls semi-automatic, computer-actuated, metal-processing equipment that desulfurizes molten iron, according to specifications, applying knowledge of metal processing.
193.362-640	Communications specialist (government services). Operates electronic communications equipment to receive and relay messages.
959.137-560	Supervisor, energy-conservation representative (light, heat and power). Plans, organizes, and directs activities of workers in energy-conservation department of utility company.

Occupational code [a] and title (continued)

020.262-600	Software technician (professional and kindred). Analyzes, plans and develops software programs; transfers programs to memory chips; installs chips on printed circuit boards; and tests and corrects operation of chips and boards, using computer equipment.
203.362-500	Word-processing operator (clerical). Operates word-processing equipment to record, edit, store, and revise correspondence, reports, statistical tables, forms, and other textual materials, utilizing clerical skills and knowledge of word-processing functions and applications.
959.367-660	Energy-conservation representative (light, heat and power). Inspects lighting-utility customers' homes to identify conditions causing energy waste and suggests remedial action to reduce waste.
022.081-600	Toxicologist (professional and kindred). Tests and investigates presence of toxic effects of cosmetic products and ingredients on laboratory animals for manufacture of cosmetics.
078.361-540	Radiation therapy technologist (medical services). Administers ionizing radiation treatment to patients requiring radiation therapy, according to work order and knowledge of machine operations, using cobalt-60 machine and linear accelerator and accessories.
007.181-500	Solar-energy-systems designer (professional and kindred). Designs solar-hot-water and space-heating systems for new and existing structures.
189.167-600	Security consultant (personal services). Plans and directs implementation of comprehensive security system and oversees protection of family members from assassination and kidnapping.

a. The number assigned to an occupation in the Dictionary of Occupational Titles (DOT), Fourth Edition, 1977.

A P P E N D I X

APPENDIX

Table A-1. Population Counts of New York State Counties

Appendix Table A-1 provides U.S. Census Bureau population counts for each of the 62 counties in New York State from the censuses of 1960, 1970 and 1980. It also provides the numerical change and the percent change over both 10-year periods (1960-1970 and 1970-1980).

Table A-2. Projected Annual Job Openings, by Occupation

Table A-2 presents estimates of job openings which result from four different sources: net employment growth, labor force separations, occupational transfers (switching from one occupation to another), and geographic transfers (moving outside a specific geographic location to work).

The methodology used for estimating occupational and geographic mobility is a conservative one and therefore tends to understate rather than overstate job openings resulting from these two sources. A recent report entitled Studies in Occupational Projections (Labor Research Report #2, September 1981) discusses the impact of job openings arising from occupational and geographic transfers and contains the detailed procedures.

Table A-3. New York State Job Service Applicants, Selected Characteristics by Age

Many individuals who need employment services register for work with the New York State Job Service. The characteristics of persons who have registered in the recent past provide a profile of the overall population in need of various types of employment and training services. Detailed characteristics of Job Service applicants are maintained as part of the Employment Security Automated Reporting System (ESARS).

Table A-3 shows characteristics of Job Service applicants by age group in fiscal year 1982 (October 1, 1981 - September 30, 1982). Percent distributions are also shown. Characteristics include: economically disadvantaged, veteran status, sex, handicapped, welfare recipients, CETA participants, and minority group.

Table A-4. New York State Job Service Applicants, Selected Characteristics by Occupational Group

This table shows selected characteristics of Job Service applicants in fiscal year 1982 by 12 major occupational groups. Percentage distributions are also shown. Characteristics include: economically disadvantaged, veteran status, sex, handicapped, welfare recipients, CETA participants, and youth.

Table A-5. Selected Characteristics of Residents in Service Delivery Areas Under the Job Training Partnership Act of 1982

Table A-5 shows selected characteristics such as 1982 annual average unemployment, unemployment rate and excess unemployment; the number of different individuals unemployed 15 weeks or longer in 1982; and number of different individuals who were economically disadvantaged according to the 1980 Census, total and for selected age groups.

Table A-1. POPULATION AND PERCENT CHANGE
NEW YORK STATE COUNTIES
1960,1970,1980

County	Population			1960-1970 Change		1970-1980 Change	
	1960	1970	1980	Net	Percent	Net	Percent
Albany	272,926	286,742	285,909	+13,816	+5.1	-833	-0.3
Allegany	43,978	46,458	51,742	+2,480	+5.6	+5,284	+11.4
Bronx	1,424,815	1,471,701	1,168,972	+46,886	+3.3	-302,729	-20.6
Broome	212,661	221,815	213,648	+9,154	+4.3	-8,167	-3.7
Cattaraugus	80,187	81,666	85,697	+1,479	+1.8	+4,031	+4.9
Cayuga	73,942	77,439	79,894	+3,497	+4.7	+2,455	+3.2
Chautauqua	145,377	147,305	146,925	+1,928	+1.3	-380	-0.3
Chemung	98,706	101,537	97,656	+2,831	+2.9	-3,881	-3.8
Chenango	43,243	46,368	49,344	+3,125	+7.2	+2,976	+6.4
Clinton	72,722	72,934	80,750	+212	+0.3	+7,816	+10.7
Columbia	47,322	51,519	59,487	+4,197	+8.9	+7,968	+15.5
Cortland	41,113	45,894	48,820	+4,781	+11.6	+2,926	+6.4
Delaware	43,540	44,718	46,824	+1,178	+2.7	+2,106	+4.7
Dutchess	176,008	222,295	245,055	+46,287	+26.3	+22,760	+10.2
Erie	1,064,688	1,113,491	1,015,472	+48,803	+4.6	-98,019	-8.8
Essex	35,300	34,631	36,176	-669	-1.9	+1,545	+4.5
Franklin	44,742	43,931	44,929	-811	-1.8	+998	+2.3
Fulton	51,304	52,637	55,153	+1,333	+2.6	+2,516	+4.8
Genesee	53,994	58,722	59,400	+4,728	+8.8	+678	+1.2
Greene	31,372	33,136	40,861	+1,764	+5.6	+7,725	+23.3
Hamilton	4,267	4,714	5,034	+447	+10.5	+320	+6.8
Herkimer	66,370	67,407	66,714	+1,037	+1.6	-693	-1.0
Jefferson	87,835	88,508	88,151	+673	+0.8	-357	-0.4
Kings	2,627,319	2,602,012	2,230,936	-25,307	-1.0	-371,076	-14.3
Lewis	23,249	23,644	25,035	+395	+1.7	+1,391	+5.9
Livingston	44,053	54,041	57,006	+9,988	+22.7	+2,965	+5.5
Madison	54,635	62,864	65,150	+8,229	+15.1	+2,286	+3.6
Monroe	586,387	711,917	702,238	+125,530	+21.4	-9,679	-1.4
Montgomery	57,240	55,883	53,439	-1,357	-2.4	-2,444	-4.4

Table A-1. (continued)

County	Population			1960-1970 Change		1970-1980 Change	
	1960	1970	1980	Net	Percent	Net	Percent
Nassau	1,300,171	1,428,838	1,321,582	+128,667	+9.9	-107,256	-7.5
New York	1,698,281	1,539,233	1,428,285	-159,048	-9.4	-110,948	-7.2
Niagara	242,269	235,720	227,354	-6,549	-2.7	-8,366	-3.5
Oneida	264,401	273,070	253,466	+8,669	+3.3	-19,604	-7.2
Onondaga	423,028	472,835	463,920	+49,807	+11.8	-8,915	-1.9
Ontario	68,070	78,849	88,909	+10,779	+15.8	+10,060	+12.8
Orange	183,734	221,657	259,603	+37,923	+20.6	+37,946	+17.1
Orleans	34,159	37,305	38,496	+3,146	+9.2	+1,191	+3.2
Oswego	86,118	100,897	113,901	+14,779	+17.2	+13,004	+12.9
Otsego	51,942	56,181	59,075	+4,239	+8.2	+2,894	+5.2
Putnam	31,722	56,696	77,193	+24,974	+78.7	+20,497	+36.2
Queens	1,809,578	1,987,174	1,891,325	+177,596	+9.8	-95,849	-4.8
Rensselaer	142,585	152,510	151,966	+9,925	+7.0	-544	-0.4
Richmond	221,991	295,443	352,121	+73,452	+33.1	+56,678	+19.2
Rockland	136,803	229,903	259,530	+93,100	+68.1	+29,627	+12.9
St. Lawrence	111,239	112,309	114,254	+1,070	+1.0	+1,945	+1.7
Saratoga	89,096	121,764	153,759	+32,668	+36.7	+31,995	+26.3
Schenectady	152,896	161,078	149,946	+8,182	+5.4	-11,132	-6.9
Schoharie	22,616	24,750	29,710	+2,134	+9.4	+4,960	+20.0
Schuyler	15,044	16,737	17,686	+1,693	+11.3	+949	+5.7
Seneca	31,984	35,083	33,733	+3,099	+9.7	-1,350	-3.8
Steuben	97,691	99,546	99,217	+1,855	+1.9	-329	-0.3
Suffolk	666,784	1,127,030	1,284,231	+460,246	+69.0	+157,201	+13.9
Sullivan	45,272	52,580	65,155	+7,308	+16.1	+12,575	+23.9
Tioga	37,802	46,513	49,812	+8,711	+23.0	+3,299	+7.1
Tompkins	66,164	77,064	87,085	+10,900	+16.4	+10,021	+13.0
Ulster	118,804	141,241	158,158	+22,437	+18.9	+16,917	+12.0
Warren	44,002	49,402	54,854	+5,400	+12.3	+5,452	+11.0
Washington	48,476	52,725	54,795	+4,249	+8.8	+2,070	+3.9
Wayne	67,989	79,404	84,581	+11,415	+16.8	+5,177	+6.5
Westchester	808,891	894,406	866,599	+85,515	+10.6	-27,807	-3.1
Wyoming	34,793	37,688	39,895	+2,895	+8.3	+2,207	+5.9
Yates	18,614	19,831	21,459	+1,217	+6.5	+1,628	+8.2

SOURCE: U.S. Department of Commerce, Bureau of the Census.

Table A-2. EMPLOYMENT A/ AND JOB OPENINGS, BY OCCUPATION
NEW YORK STATE
1974-1985

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS 1974-1985				
	1974	FY 1982 (B)	1985	TOTAL	GROWTH (C)	SEPARATIONS (D)	GEOGRAPHIC TRANSFERS (E)	OCCUP. TRANS. (F)
TOTAL, ALL OCCUPATIONS	7,447,728	7,706,817	7,815,227	764,944	33,409	300,987	84,447	346,101
PROFESSIONAL, TECHNICAL, KINDRED	1,255,783	1,331,828	1,363,648	133,534	9,806	47,732	24,134	51,862
ENGINEERS, TECHNICAL	98,064	102,455	104,294	8,965	566	1,702	2,521	4,176
ENGINEERS, CIVIL	14,735	15,923	16,420	1,258	153	357	223	525
ENGINEERS, ELECTRICAL	26,502	28,549	29,406	2,554	264	349	856	1,085
ENGINEERS, INDUSTRIAL	16,568	16,696	16,750	1,186	17	284	367	518
ENGINEERS, MECHANICAL	13,948	14,848	15,225	1,239	116	247	282	594
ENGINEERS, OTHER	26,311	26,439	26,493	2,729	17	465	793	1,454
LIFE AND PHYSICAL SCIENTISTS	19,285	19,864	20,106	1,767	75	439	373	880
CHEMISTS	11,910	12,051	12,110	932	18	263	193	458
LIFE, PHYSICAL SCIENTISTS, N.E.C.	7,375	7,813	7,996	834	56	176	180	422
MATHEMATICAL SPECIALISTS	5,731	6,160	6,339	626	55	220	154	197
ENGINEERING, SCIENCE TECHNICIANS	73,668	82,823	86,654	9,056	1,181	1,486	1,544	4,845
DRAFTERS	26,045	29,603	31,092	3,081	459	490	533	1,599
ENGINEERING, SCIENCE TECH., N.E.C.	47,623	53,220	55,562	5,975	722	996	1,011	3,246
MEDICAL WORKERS, EXC. TECH.	170,175	197,626	209,112	19,058	3,540	9,751	2,476	3,291
DIETITIANS	3,718	3,840	3,891	428	16	224	50	138
PHARMACISTS	13,063	13,931	14,294	1,081	112	648	98	223
PHYSICIANS, M.D. & OSTEOPATHIC	43,575	51,261	54,477	4,211	991	1,990	820	410
REGISTERED NURSES	79,504	90,566	95,195	9,767	1,426	5,262	1,358	1,721
THERAPISTS	10,667	14,891	16,658	1,848	545	678	104	521
OTHER MEDICAL & HEALTH PRACTITIONERS	19,648	23,137	24,597	1,723	450	949	46	278
HEALTH TECHNOLOGISTS AND TECHNICIANS	33,589	41,984	45,496	5,244	1,082	2,039	637	1,486
CLINICAL LAB TECHNOLOGISTS-TECHNICIANS	14,611	16,499	17,289	1,914	243	797	280	594
RADIOLOGIC TECHNOLOGISTS-TECHNICIANS	7,409	8,466	8,908	841	136	357	85	262
OTHER HEALTH TECHNOLOGISTS-TECHNICIANS	11,569	17,019	19,299	2,489	703	884	272	630
TECHNICIANS, EXC. HEALTH	14,016	16,922	18,138	2,148	375	234	558	981
COMPUTER SPECIALISTS	36,546	43,437	46,320	5,267	889	860	825	2,693
SOCIAL SCIENTISTS	23,187	25,820	26,922	2,811	340	586	646	1,239

CONTINUED

Table A-2. (continued)

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS 1974-1985				
	1974	FY 1982 (B)	1985	TOTAL	GROWTH (C)	SEPARATIONS (D)	GEOGRAPHIC TRANSFERS (E)	OCCUP. TRANS. (F)
TEACHERS	316,560	295,848	287,181	28,615	2,671-	12,904	5,211	13,171
ELEMENTARY SCHOOL TEACHERS	115,639	106,411	102,550	11,990	1,190-	6,051	1,383	5,746
PRESCHOOL, KINDERGARTEN TEACHERS	13,720	13,931	14,019	1,377	27	779	167	404
SECONDARY SCHOOL TEACHERS	106,793	97,161	93,130	6,664	1,242-	3,436	1,652	2,818
COLLEGE AND UNIVERSITY TEACHERS	56,629	52,130	50,247	5,485	580-	1,373	1,616	3,076
OTHER TEACHERS	23,779	26,215	27,235	3,099	314	1,265	393	1,127
WRITERS, ARTISTS, ENTERTAINERS	145,841	152,696	155,565	15,206	884	5,213	2,889	6,220
DESIGNERS	26,249	26,004	25,902	2,247	32-	901	442	936
EDITORS AND REPORTERS	26,936	27,962	28,391	2,932	132	1,094	727	979
MUSICIANS AND COMPOSERS	13,670	14,954	15,491	1,485	166	482	254	583
PAINTERS AND SCULPTORS	25,858	27,549	28,256	2,346	218	971	386	771
PUBLIC RELATIONS SPECIALISTS	14,817	14,818	14,819	1,550		542	252	756
WRITERS, ARTISTS, ENTERTAINERS, N.E.C.	38,311	41,409	42,706	4,646	400	1,223	828	2,195
OTHER PROFESSIONAL, TECHNICAL	319,121	346,193	357,521	34,772	3,491	12,298	6,300	12,683
ACCOUNTANTS	91,299	93,144	93,916	7,790	238	2,894	1,677	2,981
CLERGY	16,315	17,941	18,622	1,662	210	591	466	395
LAWYERS AND JUDGES	55,000	60,855	63,305	4,553	755	2,399	669	730
PERSONNEL & LABOR RELATIONS WORKERS	34,349	37,437	38,729	3,892	398	1,248	636	1,610
RESEARCH WORKERS, N.E.C.	18,272	20,110	20,879	2,913	237	685	764	1,227
RECREATION WORKERS	9,710	11,162	11,769	1,903	187	432	413	871
SOCIAL WORKERS	43,584	47,153	48,647	5,451	460	2,067	566	2,358
PROFESSIONAL, TECHNICAL & KINDRED WORKERS, N.E.C.	50,592	58,391	61,654	6,608	1,006	1,982	1,109	2,511
MANAGERS, OFFICIALS, PROPRIETORS	827,758	851,676	861,682	83,771	3,084	27,751	13,985	38,951
BUYERS, SALES, LOAN MANAGERS	161,379	182,299	191,052	21,226	2,698	5,263	3,900	9,365
BANK, FINANCIAL MANAGERS	55,331	66,403	71,036	7,361	1,428	1,749	1,129	3,055
CREDIT & COLLECTION MANAGERS	5,838	6,382	6,609	952	70	193	191	498
BUYERS, WHOLESALE & RETAIL	24,943	27,919	29,164	3,298	384	1,183	558	1,173
PURCHASING AGENTS, BUYERS, N.E.C.	17,726	18,865	19,341	1,858	147	542	377	792
SALES MANAGERS, RETAIL TRADE	26,041	30,352	32,156	3,995	556	828	577	2,034
SALES MANAGERS, EXC. RETAIL TRADE	31,500	32,378	32,746	3,762	113	768	1,068	1,813
ADMINISTRATORS, PUBLIC INSPECTORS	69,058	75,917	78,786	7,296	884	2,807	1,037	2,568
HEALTH ADMINISTRATORS	14,388	16,935	16,001	1,925	328	699	254	644
INSPECTORS, EXC. CONSTRUCT., PUB. ADMIN.	9,398	10,635	11,152	864	159	322	138	245
SCHOOL ADMIN., ELEM., SECONDARY	15,517	15,983	16,178	1,162	60	526	192	384
OTHER PUBLIC ADMINISTRATORS	29,755	32,364	33,455	3,344	336	1,260	453	1,295

CONTINUED

Table A-2.(continued)

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS 1974-1985				
	1974	FY 1982 (B)	1985	TOTAL	GROWTH (C)	SEPARATIONS (D)	GEOGRAPHIC TRANSFERS (E)	OCCUP. TRANS. (F)
OTHER MANAGERS, OFFICIALS, PROPRIETORS	597,321	593,460	591,844	55,249	498-	19,681	9,048	27,018
MANAGERS, SUPERINTENDANTS, BLDG.	18,635	19,901	20,431	1,992	163	973	199	657
OFFICE MANAGERS, N.E.C.	31,754	35,634	37,257	4,338	500	1,379	321	2,138
RESTAURANT, CAFE, BAR MANAGERS	42,056	39,619	38,599	3,825	314-	1,286	555	2,298
OTHER MANAGERS, ADMINISTRATORS	504,876	498,306	495,557	45,094	847-	16,043	7,973	21,925
SALES WORKERS	497,001	509,117	514,188	55,193	1,562	20,751	6,875	26,805
HUCKSTERS AND PEDDLERS	9,661	9,970	10,100	1,167	40	478	150	499
INSURANCE AGENTS, BROKERS & UNDERWRITERS	40,376	40,065	39,935	3,641	40-	1,197	481	2,003
REAL ESTATE AGENTS, BROKERS	30,638	32,446	33,203	3,469	233	1,647	324	1,265
SALES REPRES. & SALES WORKERS, N.E.C.	416,326	426,636	430,950	46,916	1,329	17,429	5,120	23,038
CLERICAL WORKERS	1,615,625	1,729,295	1,776,859	210,234	14,658	94,791	16,747	84,038
STENOGRAPHERS, TYPISTS, SECRETARIES	491,222	549,761	574,255	66,634	7,548	38,073	5,857	15,916
SECRETARIES, LEGAL	16,988	21,076	22,787	2,787	527	1,438	253	569
SECRETARIES, MEDICAL	10,807	13,642	14,828	1,942	366	894	82	600
SECRETARIES, OTHER	324,646	371,641	391,305	44,515	6,060	25,819	4,088	8,548
STENOGRAPHERS	13,718	10,712	9,454	932	388-	816	11	493
TYPISTS	125,063	132,690	135,881	16,458	983	9,186	663	5,706
OFFICE MACHINE OPERATORS	75,453	70,771	68,811	7,438	604-	2,947	1,213	3,882
KEYPUNCH OPERATORS	26,507	20,201	17,562	1,571	813-	1,334	202	848
OTHER OFFICE MACHINE OPERATORS	48,946	50,570	51,249	5,867	209	1,613	1,011	3,034
OTHER CLERICAL WORKERS	1,048,950	1,108,763	1,133,793	136,161	7,713	53,771	10,437	64,240
BANK TELLERS	35,101	40,986	43,449	5,959	759	2,208	410	2,582
BILLING CLERKS	15,488	18,156	19,272	2,430	344	1,033	127	926
BOOKKEEPERS	180,089	173,776	171,135	16,489	814-	10,004	1,738	5,561
CASHIERS	88,170	92,932	94,925	11,869	614	5,400	553	5,297
CLERICAL SUPERVISORS, N.E.C.	26,569	29,209	30,314	3,348	340	1,168	409	1,431
COUNTER CLERKS, EXCEPT FOOD	27,635	29,187	29,837	3,669	200	1,426	379	1,664
ESTIMATORS, INVESTIGATORS, N.E.C.	38,119	40,759	41,863	4,987	340	1,671	408	2,568
EXPEDITERS, PRODUCTION CONTROLLERS	20,337	21,237	21,614	2,149	116	610	234	1,189
FILE CLERKS	43,809	41,463	40,482	4,604	302-	2,625	498	1,783
LIBRARY ATTENDANTS, ASSISTANTS	12,846	12,954	12,999	2,363	14	743	427	1,179
MAIL CARRIERS, POST OFFICE	27,421	26,316	25,853	1,557	143-	437	237	1,026
MAIL HANDLERS, EXC. POST OFFICE	21,485	22,664	23,158	2,884	152	1,033	181	1,518
MESSENGERS AND OFFICE HELPERS	14,667	12,388	11,434	1,213	294-	900	62	545
PAYROLL, TIME KEEPING CLERKS	20,397	21,832	22,433	2,426	185	1,084	196	961
POSTAL CLERKS	37,142	34,118	32,353	1,969	390-	927	136	1,296
RECEPTIONISTS	42,276	46,512	48,284	6,089	546	3,171	279	2,093
SHIPPING, RECEIVING CLERKS	44,773	45,071	45,195	3,748	38	1,187	315	2,208

CONTINUED

Table A-2.(continued)

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS 1974-1985				
	1974	FY 1982 (B)	1985	TOTAL	GROWTH (C)	SEPARATIONS (D)	GEOGRAPHIC TRANSFERS (E)	OCCUP. TRANS. (F)
STATISTICAL CLERKS	45,458	43,586	42,803	4,608	241-	2,233	262	2,354
STOCK CLERKS, STORE KEEPERS	42,095	44,974	46,178	4,835	371	1,226	450	2,788
TEACHER AIDES, EXC. MONITORS	24,589	26,421	27,188	2,985	236	1,138	79	1,532
TELEPHONE OPERATORS	41,762	37,291	35,420	3,586	577-	2,559	336	1,268
MISC. CLERICAL WORKERS, N.E.C.	198,722	246,931	267,104	42,392	6,217	10,988	2,716	22,471
CRAFT & KINDRED WORKERS	869,912	892,401	901,810	65,112	2,900	19,966	7,990	34,256
CONSTRUCTION CRAFT WORKERS	227,983	244,158	250,925	17,015	2,086	5,196	2,155	7,578
CARPENTERS & APPRENTICES	63,036	66,385	67,786	4,538	432	1,583	531	1,992
BRICKMASONS & STONEMASONS & APPRENT.	11,232	11,677	11,863	752	57	193	70	432
CEMENT AND CONCRETE FINISHERS	4,293	4,563	4,676	246	35	83	32	96
ELECTRICIANS & APPRENTICES	44,165	48,014	49,624	3,545	496	841	720	1,488
EXCAVATING, GRADING MACH. OPERATORS EXC. BULLDOZER	14,625	19,500	21,535	1,741	627	334	78	702
PAINTERS, CONSTRUCTION & MAINTENANCE	34,209	32,118	31,243	1,800	270-	914	225	931
PLUMBERS AND PIPEFITTERS & APPRENT.	33,085	36,721	38,243	2,418	469	737	257	955
ROOFERS AND SLATERS	5,679	6,286	6,540	534	78	104	113	239
STRUCTURAL METAL CRAFT WORKERS	5,738	5,993	6,100	474	33	111	90	240
CONSTRUCTION CRAFTS, N.E.C.	11,911	12,901	13,315	966	128	296	39	503
BLUE-COLLAR SUPERVISORS, N.E.C.	125,755	130,124	131,952	10,912	563	3,322	1,171	5,856
METALWORKING CRAFTS EXC. MECHANICS	75,162	75,050	75,002	5,672	15-	1,550	623	3,514
MACHINISTS & APPRENTICES	24,205	23,173	22,741	2,129	133-	478	255	1,529
MILLWRIGHTS	4,847	5,133	5,252	438	37	114	51	236
SHEET METAL WORKERS, TINSMITHS	11,137	10,724	10,551	671	53-	177	107	440
TOOL & DIEMAKERS & APPRENT.	14,279	14,707	14,886	907	55	293	103	456
METAL CRAFTS, N.E.C.	20,694	21,313	21,572	1,528	80	488	107	853
MECHANICS, REPAIRERS, INSTALLERS	217,537	233,261	239,840	17,864	2,028	4,078	2,472	9,286
AIR COND., HEATING & REFRIG.	19,139	22,177	23,448	1,737	392	370	288	687
AIRCRAFT: MECHANICS AND REPAIRERS	8,798	9,831	10,267	881	134	118	157	472
AUTO MECHANICS & APPRENT.	67,725	73,438	75,829	5,219	737	1,177	661	2,644
HEAVY EQUIP. MECH. INCL. DIESEL	52,340	53,089	53,402	3,345	97	1,125	637	1,486
HOUSEHOLD APPLIANCE MECHANICS	11,330	12,567	13,085	950	160	250	88	452
RADIO, TELEVISION REPAIRERS	10,142	11,894	12,627	1,066	226	198	71	571
RAILROAD, CAR SHOP REPAIRERS	4,711	4,093	3,834	135	80-	88	16	111
OTHER MECHANICS AND REPAIRERS	43,360	46,172	47,348	4,532	363	752	554	2,863

CONTINUED

Table A-2.(continued)

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS 1974-1985				
	1974	FY 1982 (B)	1985	TOTAL	GROWTH (C)	SEPAR-ATIONS (D)	GEOGRAPHIC TRANSFERS (E)	OCCUP. TRANS. (F)
PRINTING TRADES CRAFT WORKERS	45,938	40,585	38,345	2,293	690-	1,075	309	1,599
COMPOSITORS AND TYPESETTERS	19,164	15,630	14,151	928	456-	509	125	750
PRINTING PRESS OPERATORS	17,310	16,348	15,946	655	124-	305	98	376
OTHER PRINTING CRAFTS	9,464	8,607	8,248	709	111-	261	86	473
TRANSPORTATION, PUB. UTIL. CRAFT WORKERS	52,850	52,471	52,312	2,853	49-	613	196	2,093
TELEPHONE INSTALLERS, REPAIRERS	38,224	37,904	37,770	2,050	41-	385	152	1,554
OTHER TRANSP. CRAFTS .	14,626	14,567	14,542	803	8-	228	44	539
OTHER CRAFT & KINDRED WORKERS	124,687	116,752	113,434	8,503	1,023-	4,132	1,064	4,330
BAKERS	13,346	12,224	11,755	672	145-	377	73	367
CABINETMAKERS	6,279	5,401	5,034	338	113-	192	27	232
CRANE, DERRICK, & HOIST OPERATORS	9,552	9,322	9,226	611	30-	202	47	392
DECORATORS, WINDOW DRESSERS	6,921	6,791	6,737	737	17-	279	149	326
INSPECTORS, OTHER THAN LUMBER	11,404	10,992	10,819	899	53-	325	110	517
STATIONARY ENGINEERS	13,365	12,434	12,045	896	120-	406	187	423
TAILORS	12,435	10,050	9,052	465	308-	522	20	231
UPHOLSTERERS	4,679	4,461	4,373	345	28-	199	45	129
CRAFT & KINDRED WORKERS, N.E.C.	46,706	45,077	44,396	3,539	210-	1,630	406	1,713
OPERATIVES, EXC. TRANSPORT	734,083	689,488	670,827	56,757	5,751-	25,963	4,087	32,458
SEMISKILLED METALWORKING	76,457	74,842	74,166	4,724	208-	1,731	260	2,941
PUNCH & STAMPING PRESS OPERS.	8,025	7,457	7,219	502	73-	240	22	313
SOLDERERS	3,663	2,508	2,024	161	149-	126	13	171
WELDERS AND FLAME CUTTERS	28,527	30,306	31,051	1,888	229	568	121	970
OTHER SEMISKILLED METALWORKING OPERS.	36,242	34,571	33,872	2,173	215-	797	104	1,487
SEMISKILLED TEXTILE OPERATIVES	14,481	11,322	10,000	967	407-	514	138	722
SPINNERS, TWISTERS, WINDERS	1,590	1,452	1,394	144	18-	82	0	80
OTHER TEXTILE OPERATIVES	12,891	9,870	8,606	822	390-	432	138	642
SEMISKILLED PACKING, INSPECTING	112,906	112,414	112,208	9,409	63-	4,490	596	4,386
CHECKERS, EXAMINERS, ETC., MFG.	47,750	50,495	51,643	4,249	354	1,774	303	1,818
PACKERS, WRAPPERS, & PRODUCE GRADERS	57,135	53,588	52,104	4,362	457-	2,300	268	2,251
OTHER SEMISKILLED PACKING, INSPECTING	8,021	8,331	8,461	798	40	416	25	317
OTHER OPERATIVES, EXC. TRANSPORT	530,239	490,910	474,453	41,659	5,071-	19,228	3,093	24,409
ASSEMBLERS	75,934	78,103	79,010	7,401	280	2,903	391	3,827
BOTTLING & CANNING OPERATIVES	3,353	2,977	2,820	200	48-	96	33	119
CLOTHING IRONERS AND PRESSERS	17,086	12,714	10,884	572	564-	602	64	470
CUTTING OPERATIVES, N.E.C.	22,428	20,578	19,804	1,488	239-	678	185	864
DRESSMAKERS, EXC. FACTORY	8,839	7,609	7,095	755	159-	556	99	259

CONTINUED

Table A-2.(continued)

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS 1974-1985				
	1974	FY 1982 (B)	1985	TOTAL	GROWTH (C)	SEPAR-ATIONS (D)	GEOGRAPHIC TRANSFERS (E)	OCCUP. TRANS. (F)
DRILLERS, EARTH	2,485	2,661	2,735	239	23	57	37	122
FILERS, POLISHERS, SANDERS, BUFFERS	9,340	7,991	7,426	525	174-	235	56	408
GARAGE WORKERS, GAS STATION ATTENDANT	20,099	19,221	18,854	2,221	113-	335	211	1,788
LAUNDRY, DRY CLEANING OPERATORS, N.E.C.	16,283	15,347	14,955	1,228	121-	704	31	614
MEAT CUTTERS, BUTCHERS, EXC. MFG.	21,744	20,180	19,525	1,096	202-	592	141	565
MEAT CUTTERS, BUTCHERS	2,124	1,834	1,713	215	37-	49	42	161
PAINTERS, MFG. ARTICLES	10,073	9,020	8,580	585	136-	225	90	406
PHOTOGRAPHIC PROCESS WORKERS	11,162	11,806	12,076	1,069	83	349	59	578
SAILORS AND DECKHANDS	3,348	2,572	2,247	81	100-	65	13	103
SAWYERS	4,075	3,798	3,682	409	36-	115	34	296
SEWERS AND STITCHERS	109,976	93,137	86,091	5,941	2,171-	5,970	559	1,583
FURNACE TENDERS & STOKERS, EXC. METAL	7,845	7,227	6,968	445	80-	215	79	231
MACHINE OPER., MISC. SPECIFIED	80,947	75,639	73,418	7,265	684-	2,352	378	5,219
OPERATIVES, N.E.C.	103,098	98,496	96,570	9,924	593-	3,130	591	6,796
TRANSPORT EQUIPMENT OPERATIVES	264,042	263,393	263,122	20,117	84-	5,405	1,194	13,602
BUS DRIVERS	29,200	29,227	29,239	2,230	4	706	88	1,432
DELIVERY AND ROUTE WORKERS	72,155	72,331	72,405	5,770	23	1,334	362	4,051
FORK LIFT, TOW MOTOR OPER.	16,744	17,149	17,318	1,664	52	258	34	1,320
TRUCK DRIVERS	92,109	92,021	91,984	7,168	11-	1,566	552	5,061
OTHER TRANSPORT EQUIP. OPERATIVES	53,834	52,665	52,176	3,286	151-	1,541	158	1,738
SERVICE WORKERS	995,180	1,052,610	1,076,641	102,470	7,406	48,814	7,604	38,646
CLEANING SERVICE WORKERS	202,699	215,110	220,303	21,412	1,600	9,729	1,053	9,030
LODGING QURTS. CLEANERS, EXC. PRIVATE H'SHLD.	15,768	17,381	18,056	1,921	208	1,087	70	556
BUILDING INTERIOR CLEANERS, N.E.C.	92,259	101,753	105,726	10,198	1,224	4,700	407	3,867
JANITORS AND SEXTONS	94,672	95,976	96,521	9,293	168	3,942	576	4,607
FOOD SERVICE WORKERS	270,465	283,838	289,434	28,867	1,724	12,118	2,275	12,750
BARTENDERS	23,421	25,413	26,247	2,417	257	864	127	1,169
COOKS, EXC. PRIVATE	62,637	68,775	71,343	6,863	791	2,496	550	3,026
DISHWASHERS	14,130	14,291	14,358	1,290	21	412	100	757
FOOD COUNTER, FOUNTAIN WORKERS	36,569	37,523	37,922	3,936	123	1,749	263	1,801
WAITERS	86,611	91,045	92,901	7,299	572	4,630	1,001	5,096
FOOD WORKERS, N.E.C., EXC. PRIVATE	47,097	46,791	46,663	5,063	39-	1,967	234	2,901
HEALTH SERVICE WORKERS	154,126	198,687	217,333	24,379	5,746	10,948	1,594	6,091
DENTAL ASSISTANTS	9,618	11,341	12,062	1,492	222	794	34	442
HEALTH AIDES, EXCEPT NURSING	17,890	21,667	23,247	3,146	487	1,208	238	1,213
NURSING AIDES, ORDERLIES & ATTEN.	88,755	111,813	121,462	12,846	2,973	5,624	783	3,466
PRACTICAL NURSES	37,863	53,866	60,562	6,895	2,064	3,322	539	970

CONTINUED

Table A-2. (continued)

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS 1974-1985				
	1974	FY 1982 (B)	1985	TOTAL	GROWTH (C)	SEPARATIONS (D)	GEOGRAPHIC TRANSFERS (E)	OCCUP. TRANS. (F)
PERSONAL SERVICE WORKERS	130,402	130,305	130,263	12,760	13-	7,481	1,320	3,972
ATTEN., RECREATION, AMUSEMENT	6,312	6,835	7,054	721	67	272	68	314
ATTEN., PERSONAL SERVICES, N.E.C.	12,553	10,977	10,317	1,021	203-	752	165	307
BARBERS	11,320	10,629	10,340	636	89-	491	32	202
CHILD CARE WORKERS, EXC. PRIVATE	19,497	22,908	24,335	2,685	440	1,328	92	825
ELEVATOR OPERATORS	13,430	9,686	8,119	419	483-	573	87	242
HAIRDRESSERS, COSMETOLOGISTS	36,317	37,051	37,358	3,288	95	2,193	296	704
HOUSEKEEPERS, EXC. PRIVATE	9,098	8,625	8,427	1,124	61-	478	155	552
PERSONAL SERVICE WORKERS, N.E.C.	21,875	23,594	24,313	2,867	222	1,394	425	826
PROTECTIVE SERVICE WORKERS	162,518	173,037	177,439	11,386	1,356	4,028	1,075	4,927
FIRE FIGHTERS	22,219	22,640	22,816	791	54	261	136	340
GUARDS (CROSSING GUARDS & WATCHMEN)	65,721	64,538	64,043	4,840	153-	2,863	452	1,678
POLICE AND DETECTIVES	70,648	81,246	85,681	5,217	1,367	763	487	2,600
SHERIFFS, BAILIFFS AND MARSHALLS	3,930	4,613	4,899	538	88	141	0	309
PRIVATE HOUSEHOLD WORKERS	74,970	51,633	41,869	3,664	3,009-	4,510	287	1,876
CHILD CARE WORKERS	22,900	15,758	12,770	1,299	921-	1,432	63	725
CLEANERS & SERVANTS, PRIVATE	39,610	27,626	22,612	1,776	1,545-	2,326	166	829
OTHER PRIVATE HOUSEHOLD WORKERS	12,460	8,249	6,487	589	543-	752	58	322
LABORERS, EXCEPT FARM	293,539	297,947	299,790	29,173	568	6,496	2,221	19,888
CONSTRUCTION LABR., EXC. CARPENTERS HELPER	51,652	53,022	53,595	5,535	177	957	371	4,030
FREIGHT, MATERIAL HANDLERS	55,792	53,089	51,958	3,736	349-	1,006	425	2,654
GARBAGE COLLECTORS	14,942	17,792	18,984	1,298	367	219	71	641
GARDENERS, GROUNDKEEPERS, EXC. FARM	37,971	41,297	42,689	3,568	429	1,487	165	1,487
LONGSHORE WORKERS & STEVEDORES	8,863	6,785	5,915	146	268-	183	68	163
STOCK HANDLERS	55,125	58,059	59,287	7,940	378	943	755	5,864
VEHICLE WASHERS, EQUIP. CLEANERS	11,283	10,634	10,362	769	84-	226	85	542
WAREHOUSE LABORERS, N.E.C.	6,623	5,737	5,366	515	114-	118	75	436
OTHER LABORERS	51,288	51,532	51,634	5,665	31	1,357	206	4,071
FARMERS AND FARM WORKERS	94,805	89,062	86,660	8,583	740-	3,318	410	5,595
FARMERS AND FARM MANAGERS	42,716	41,345	40,772	3,549	177-	1,824	124	1,778
FARM LABORERS, FARM SUPERVISORS	52,089	47,717	45,888	5,033	564-	1,494	286	3,817

Table A-2.(continued)

A. THIS EMPLOYMENT CONCEPT DIFFERS FROM BOTH THE NONAGRICULTURAL EMPLOYMENT AND TOTAL RESIDENT EMPLOYED SERIES. THE EMPLOYMENT FIGURES REPRESENT NUMBER OF PERSONS (NOT JOBS) BY PLACE OF WORK. TOTAL EMPLOYMENT WAS DERIVED BY ADJUSTING NONAGRICULTURAL EMPLOYMENT, USING NATIONAL RATIOS, TO ELIMINATE MULTIPLE JOBHOLDING AND ADDING PERSONS WITH A JOB, BUT NOT ON EMPLOYER PAYROLLS. ESTIMATES WERE MADE OF SELF-EMPLOYED AND UNPAID FAMILY WORKERS, DOMESTICS, AND AGRICULTURAL WORKERS.
B. FIGURES FOR 1982 ARE SIMPLE LINEAR INTERPOLATIONS OF 1974 AND 1985 DATA, AND SHOULD NOT BE INTERPRETED AS REPRESENTING CYCLICAL FLUCTUATIONS IN THE ECONOMY.
C. CHANGE IN EMPLOYMENT 1974-1985, DIVIDED BY 11
D. OPENINGS RESULTING FROM RETIREMENTS, DEATHS, WOMEN LEAVING THE LABOR FORCE TO RAISE FAMILIES, AND OTHER LABOR FORCE SEPARATIONS.
E. OPENINGS RESULTING FROM THE MOVEMENT OF WORKERS OUT OF THE GIVEN AREA TO ANOTHER AREA.
F. OPENINGS RESULTING FROM THE MOVEMENT OF WORKERS OUT OF THE GIVEN OCCUPATION TO ANOTHER OCCUPATION. OCCUP. TRANS. IS THE ABBREVIATION FOR OCCUPATIONAL TRANSFERS.

NOTE: FIGURES ARE PRESENTED IN UNITS AND THUS IMPLY A LEVEL OF ACCURACY FAR BEYOND THE ESTIMATING AND PROJECTION TECHNIQUES. THEREFORE, SUCH NUMBERS ARE TO BE REGARDED AS APPROXIMATIONS. THE FIGURES SHOULD BE USED AS INDICATORS OF RELATIVE EMPLOYMENT LEVELS AND GROWTH.
DETAIL MAY NOT ADD TO TOTALS BECAUSE OF ROUNDING.

Table A-3. NEW YORK STATE JOB SERVICE APPLICANTS
SELECTED CHARACTERISTICS, BY AGE
FISCAL YEAR 1982

Applicant groups	Total all ages	Under 20	20-24	25-39	40-54	55+
All applicants	961,151	125,308	223,044	391,558	164,578	56,663
Economically disadvantaged	370,119	50,944	66,505	164,583	73,366	14,721
Veterans	116,579	732	17,934	54,530	27,151	16,232
Vietnam Era	39,123	104	1,706	33,319	3,446	548
Women	484,543	63,710	98,944	196,079	96,753	29,057
Handicapped	79,595	2,636	7,304	35,579	26,011	8,065
Welfare recipients	218,936	17,200	35,065	108,930	49,652	8,089
CETA a/	6,381	2,341	1,403	1,920	565	152
Minority	398,709	55,420	80,086	173,391	73,428	16,384
Black, not Hispanic	257,466	42,212	55,272	107,492	42,080	10,410
Hispanic	129,710	12,410	22,774	60,323	28,863	5,340
Other	11,533	798	2,040	5,576	2,485	634
	Percentages of age groups in each applicant group b/					
All applicants	100.0	13.0	23.2	40.7	17.1	5.9
Economically disadvantaged	100.0	13.8	18.0	44.5	19.8	4.0
Veterans	100.0	0.6	15.4	46.8	23.3	13.9
Vietnam Era	100.0	0.3	4.4	85.2	8.8	1.4
Women	100.0	13.1	20.4	40.5	20.0	6.0
Handicapped	100.0	3.3	9.2	44.7	32.7	10.1
Welfare recipients	100.0	7.9	16.0	49.8	22.7	3.7
CETA a/	100.0	36.7	22.0	30.1	8.9	2.4
Minority	100.0	13.9	20.1	43.5	18.4	4.1
Black, not Hispanic	100.0	16.4	21.5	41.7	16.3	4.0
Hispanic	100.0	9.6	16.3	46.5	22.3	4.1
Other	100.0	6.9	17.7	48.3	21.5	5.5
	Percentages of applicant groups in each age group					
All applicants	100.0	100.0	100.0	100.0	100.0	100.0
Economically disadvantaged	38.5	40.7	29.8	42.0	44.6	26.0
Veterans	12.1	0.6	8.0	13.9	16.5	28.6
Vietnam Era	4.1	0.1	0.8	8.5	2.1	1.0
Women	50.4	50.8	44.4	50.1	58.8	51.3
Handicapped	8.3	2.1	3.3	9.1	15.8	14.2
Welfare recipients	22.8	13.7	15.7	27.8	30.2	14.3
CETA a/	0.7	1.9	0.6	0.5	0.3	0.3
Minority	41.5	44.2	35.9	44.3	44.6	28.9
Black, not Hispanic	26.8	33.7	24.8	27.5	25.6	18.4
Hispanic	13.5	9.9	10.2	15.4	17.5	9.4
Other	1.2	0.6	0.9	1.4	1.5	1.1

a. Enrolled in Comprehensive Employment and Training Act program.
b. Detail may not add to total due to rounding.
SOURCE: Employment Security Automated Reporting System (ESARS).

Table A-4. NEW YORK STATE JOB SERVICE APPLICANTS, SELECTED CHARACTERISTICS BY OCCUPATIONAL GROUP FISCAL YEAR 1982

Occupational group	All applicants	Economically disadvantaged	Veterans	Women	Handicapped	Welfare recipient	CETA [a]	Youth [b]
All groups	833,190	334,267	112,387	415,358	76,656	210,682	4,557	165,707
Professional, technical, managerial	107,112	13,201	20,032	50,146	5,719	7,459	298	6,018
Clerical	213,991	75,947	14,062	160,516	13,360	39,997	1,110	61,375
Sales	39,249	8,959	5,885	18,242	2,696	5,504	111	8,008
Service	141,220	73,026	14,020	78,642	16,934	48,092	1,097	31,731
Agriculture, fishery, forestry	9,527	3,833	1,262	1,410	901	2,670	100	3,329
Processing	13,666	5,444	2,443	3,988	1,203	3,522	55	1,487
Machine trades	48,478	16,007	12,517	6,797	3,956	8,770	347	7,181
Benchwork	62,785	29,017	4,097	42,965	8,879	19,161	241	6,629
Structural work	67,097	30,480	17,900	9,322	6,832	18,599	575	10,622
Motor freight and transportation	27,061	11,216	9,058	1,667	2,698	6,411	156	3,089
Packaging and material handling	98,104	65,338	9,908	40,382	13,059	49,494	451	25,485
Other occupations	4,900	1,799	1,203	1,281	419	1,003	16	753
		Percentages of applicant groups in each occupational group						
All groups	100.0	40.1	13.5	49.9	9.2	25.3	0.5	19.9
Professional, technical, managerial	100.0	12.3	18.7	46.8	5.3	7.0	0.3	5.6
Clerical	100.0	35.5	6.6	75.0	6.2	18.7	0.5	28.7
Sales	100.0	22.8	15.0	46.5	6.9	14.0	0.3	20.4
Service	100.0	51.7	9.9	55.7	12.0	34.1	0.8	22.5
Agriculture, fishery, forestry	100.0	40.2	13.2	14.8	9.5	28.0	1.0	34.9
Processing	100.0	39.8	17.9	29.2	8.8	25.8	0.4	10.9
Machine trades	100.0	33.0	25.8	14.0	8.2	18.1	0.7	14.8
Benchwork	100.0	46.2	6.5	68.4	14.1	30.5	0.4	10.6
Structural work	100.0	45.4	26.7	13.9	10.2	27.7	0.9	15.8
Motor freight and transportation	100.0	41.4	33.5	6.2	10.0	23.7	0.6	11.4
Packaging and material handling	100.0	66.6	10.1	41.2	13.3	50.5	0.5	26.0
Other occupations	100.0	36.7	24.6	26.1	8.6	20.5	0.3	15.4

Table A-4. (continued)

Occupational group	All applicants	Economically disadvantaged	Veterans	Women	Handicapped	Welfare recipient	CETA [a]	Youth [b]
	Percentages of occupational groups in each applicant group							
All groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, managerial	12.9	3.9	17.8	12.1	7.5	3.5	6.5	3.6
Clerical	25.7	22.7	12.5	38.6	17.4	19.0	24.4	37.0
Sales	4.7	2.7	5.2	4.4	3.5	2.6	2.4	4.8
Service	16.9	21.8	12.5	18.9	22.1	22.8	24.1	19.1
Agriculture, fishery, forestry	1.1	1.1	1.1	0.3	1.2	1.3	2.2	2.0
Processing	1.6	1.6	2.2	1.0	1.6	1.7	1.2	0.9
Machine trades	5.8	4.8	11.1	1.6	5.2	4.2	7.6	4.3
Benchwork	7.5	8.7	3.6	10.3	11.6	9.1	5.3	4.0
Structural work	8.1	9.1	15.9	2.2	8.9	8.8	12.6	6.4
Motor freight and transportation	3.2	3.4	8.1	0.4	3.5	3.0	3.4	1.9
Packaging and material handling	11.8	19.5	8.8	9.7	17.0	23.5	9.9	15.4
Other occupations	0.6	0.5	1.1	0.3	0.5	0.5	0.4	0.5

a. Enrolled in Comprehensive Employment and Training Act program.

b. Under 22 years of age.

NOTE: Detail may not add to total due to rounding. Also, an individual may be classified in more than one applicant group. Applicants are more numerous on Table than on this table because these applicants are limited to those assigned occupations.

SOURCE: Employment Security Automated Reporting System (ESARS).

Table A-5. SELECTED CHARACTERISTICS OF RESIDENTS IN SERVICE DELIVERY AREAS UNDER THE JOB TRAINING PARTNERSHIP ACT OF 1982

Service Delivery Areas 1/	1982 annual averages			Individuals unemployed 15 weeks or longer in 1982	1980 economically disadvantaged individuals		
	Total unemployed	Unemployment rate	Excess unemployed		Total	16-21 years	22 years and over
Albany-Schenectady-Rensselaer counties	18,360	6.7	5,952	26,100	90,174	14,019	50,868
Allegany-Cattaraugus-Chautauqua counties	13,100	10.7	7,600	15,400	52,229	7,027	28,299
Broome-Tioga counties	9,170	7.5	3,676	11,200	39,075	6,002	21,661
Buffalo City-Cheektowaga-Tonawanda towns	34,117	14.0	23,119	34,600	120,208	14,982	68,218
Cayuga-Cortland-Tompkins counties	8,666	9.2	4,413	12,500	40,657	8,689	21,283
Chemung-Schuyler-Steuben counties	9,954	11.3	5,980	13,900	39,064	4,662	21,391
Clinton-Essex-Franklin-Hamilton counties	8,477	12.0	5,292	11,200	35,992	5,293	19,576
Columbia-Greene counties	4,088	9.5	2,196	5,200	17,372	1,715	10,544
Delaware-Otsego-Chenango counties	6,183	8.8	3,006	8,500	31,006	4,661	16,944
Dutchess-Putnam counties	8,569	5.9	2,015	12,000	33,477	3,864	19,764
Erie County balance 2/	21,044	10.3	11,829	27,800	41,496	4,933	24,311
Fulton-Montgomery-Schoharie counties	6,944	10.8	4,053	7,000	25,746	2,710	14,861
Genesee-Livingston-Orleans-Wyoming counties	9,728	10.3	5,499	10,700	28,426	3,842	15,324
Hempstead-Long Beach towns	24,882	6.4	7,362	25,100	73,266	8,532	41,284
Herkimer-Madison-Oneida counties	14,736	8.9	7,310	18,500	70,782	9,371	38,963
Jefferson-Lewis counties	5,667	11.4	3,435	7,000	23,981	2,874	13,265
Monroe County balance 3/	10,605	4.6	258	15,500	31,998	6,040	17,558
Nassau County balance 4/	15,354	5.4	2,519	15,000	36,602	4,411	22,123
New York City	292,834	9.6	154,950	350,100	2,012,084	232,615	1,123,045
Niagara County	14,500	14.2	9,918	14,700	31,244	3,803	17,314
Onondaga County balance-Oswego County 5/	14,261	7.4	5,536	15,100	46,989	6,315	25,388
Ontario-Seneca-Wayne-Yates counties	10,296	9.4	5,357	12,900	32,376	4,045	18,078
Orange County	9,037	8.4	4,185	10,500	39,420	4,411	21,382

Table A-5. (continued)

Service Delivery Areas 1/	1982 annual averages			Individuals unemployed 15 weeks or longer in 1982	1980 economically disadvantaged individuals		
	Total unemployed	Unemployment rate	Excess unemployed		Total	16-21 years	22 years and over
Rochester City	11,213	10.1	6,233	12,700	59,620	7,667	31,542
Rockland County	6,991	5.8	1,588	8,200	25,929	2,705	13,333
St. Lawrence County	4,297	10.3	2,429	6,300	27,680	4,277	14,576
Saratoga-Warren-Washington counties	9,761	8.2	4,379	12,700	41,615	5,200	22,610
Suffolk County	44,526	6.7	14,785	51,900	146,226	17,567	76,933
Sullivan-Ulster counties	7,416	7.7	3,103	10,000	40,253	4,975	24,188
Syracuse City	7,040	9.3	3,649	7,500	43,042	7,533	22,836
Westchester County balance 6/	17,695	4.9	1,485	25,800	67,965	7,369	40,798
Yonkers City	7,133	7.0	2,518	10,000	30,777	3,460	17,249

NOTE: Excess unemployment is defined as unemployment in excess of 4½ percent of the labor force. The economically disadvantaged are those persons whose family income was at or below the poverty level or 70 percent of the lower living standard income level, whichever was higher, according to the 1980 Census.

1. Proposed service delivery areas as of 6/7/83.
2. Erie County minus Buffalo City, Cheektowaga and Tonawanda towns.
3. Monroe County minus Rochester City.
4. Nassau County minus Hempstead and Long Beach towns.
5. Onondaga County minus Syracuse City.
6. Westchester County minus Yonkers City.

G L O S S A R Y

GLOSSARY

EMPLOYMENT SECURITY CONCEPTS

1. Total Employment and Total Unemployment

Civilian labor force. The sum of total employed and total unemployed persons by place of residence.

Employed persons. Employed persons comprise: a) all those who during the survey week did any work at all as paid employees, or in their own business, profession, or farm, or who worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family, and, b) all those who were not working but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, labor-management dispute, or personal reasons, whether or not they were paid by their employers for the time off, and and whether or not they were seeking other jobs.

Unemployed persons. Unemployed persons comprise all persons who did not work during the survey week, who made specific efforts to find a job within the past 4 weeks, and who were available for work during the survey week (except for temporary illness). Also included as unemployed are those who did not work at all, were available for work, and a) were waiting to be called back to a job from which they had been laid off, or b) were waiting to report to a new wage or salary job within 30 days.

Unemployment rate. The total number of unemployed persons expressed as a percentage of total employment and unemployment combined, that is, as a percentage of the civilian labor force.

2. Nonagricultural Employment

Employment, nonfarm. Estimates include all nonagricultural wage and salary jobs in an area for which workers received pay for any part of the pay period that included the 12th of the month. Persons on paid sick leave, paid holiday, or paid vacation are included, but those on leave without pay for the entire payroll period are excluded. Persons on the payroll of more than one establishment during the period are counted each time reported. Self-employed persons, unpaid family workers, and domestic workers in private households are excluded.

Nonagricultural establishments. All employing units except commercial and noncommercial farms, international government, and private households.

NOTE: The concepts of employed and unemployed under the Employment Security programs, the Current Population Survey and the Census all attempt to measure identical categories but use different methodologies.

Standard Industrial Classification (SIC). Nonagricultural wage and salary estimates are classified in accordance with the 1972 edition of the Standard Industrial Classification Manual, prepared by the Statistical Policy Division, Office of Management and Budget, Executive Office of the President, except for government employment, which is classified in accordance with the 1967 edition. Coverage of the classification "services and miscellaneous" for New York State includes: the "Services Industry Division," "Forestry," "Fisheries," selected services relating to agriculture and nonclassifiable establishments. (A manufacturing industry is an aggregation of establishments producing a single product or a closely related group of products. An establishment which manufactures more than one product is classified by its most important product as determined by its share of value added at the establishment.)

3. Hours and Earnings

Earnings, average. The figures are calculated on a "gross" basis, reflecting basic hourly and incentive wage rates, also premium pay for overtime and shift work as well as output of workers paid on an incentive plan.

For manufacturing, the averages cover production and related workers. For nonmanufacturing, the averages cover all nonsupervisory employees and working supervisors (e.g., office workers, sales workers, custodial workers), unless otherwise specified, in selected industries.

Earnings differ from wage rates. Earnings are the actual return to the worker for a stated period of time; rates are the amounts stipulated for a given unit of work or time.

Earnings, average hourly. Represent payrolls divided by total number of hours worked or paid for (including paid holiday, vacation, and sick-leave hours) during the period reported.

Earnings, average weekly. Derived by multiplying average weekly hours by average hourly earnings. Therefore, weekly earnings are affected not only by changes in average hourly earnings but also by changes in length of the workweek.

Hours, average weekly. The workweek information relates to the hours for which pay was received and differs from the standard or scheduled hours; the average is derived by dividing the total hours worked or paid for (including paid holiday, vacation, and sick-leave hours) during the reference week by the number of employees. Factors such as overtime cause average weekly hours to exceed standard hours while unpaid absenteeism, labor turnover, part-time work, and stoppages cause average weekly hours to be lower than scheduled hours. Group averages further reflect differences in the workweek of component industries.

Production workers. Includes working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial and watchman services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with the above production operations. Excludes supervisory employees (above the working-foreman level) and their clerical staffs, routemen, salesmen, and force-account construction workers.

4. Unemployment Insurance Program

Beneficiary. An individual who filed a valid original claim, established a benefit year, and received at least one benefit payment for a full or partial week of unemployment during his or her benefit year. Beneficiary characteristics data are obtained for the mid-week of the month. In this report, characteristics data on beneficiaries were obtained from an unduplicated count of persons who received a benefit payment in 1982.

Industry. The industrial classification of beneficiaries is based on that of the chargeable employer, that is, the employer whose account is debited for the benefit payment--usually the last employer.

Unemployment benefits. Amounts paid to eligible claimants with respect to their unemployment.

5. Job Service

Active applicants. Jobseekers registered with the Job Service, whose applicant record, on a given day, has not expired. Generally, applicant records become inactive within 2 to 6 months if no reportable service occurs in the intervening months.

Applicant placed. The hiring by an employer of an individual referred by the employment service for a job or interview providing that the employment service completed all of the following steps: a) prepared a job order form prior to referral; b) made prior arrangements with the employer for the referral of an individual or individuals; c) referred an individual who had not been specifically designated by the employer; d) verified from a reliable source, preferably the employer that the individual had entered on the job; and e) recorded the placement on appropriate employment service forms.

Job applicant registered. An applicant whose availability for referral to job opportunities, training, and/or employability development services has been officially recorded on an application.

Job opening filled. Job opening for which an applicant referred by a local office has been hired by an employer and has entered on the job.

ESARS (Employment Security Automated Reporting System). A computer system providing data printouts on a wide range of Job Service operations concerning job orders, job applicants and departmental programs.

Job Bank. A computerized system for listing employers' job orders given to Job Service local offices and through which applicants seek jobs through daily updates of available employment opportunities.

Dictionary of Occupational Titles (DOT). A dictionary, prepared by the U.S. Department of Labor, which classifies occupations by title and code, and gives an extensive analysis and description of the job duties each occupation entails and what traits are needed by workers.

6. Job Training Partnership Act of 1982 (JTPA)

This law is designed to provide remedial education, training and employment assistance to low income and unemployed youths and adults primarily through a locally-based program delivery system. It is composed of five titles or major sections:

Title I - deals with state and local service delivery system and general program and administrative issues.

Title II - authorizes funding and sets forth requirements for training services to be provided at the local level for disadvantaged youth and adults.

Title III - provides for a separate, state-administered training and employment aid program for dislocated workers which requires state consultation with local private industry councils at key points of decisionmaking.

Title IV - establishes funding and requirements for federally administered activities including: programs for Native Americans, migrant workers and veterans; Job Corps; research, demonstration, evaluation, training and technical assistance; labor market information systems; and functions of the National Commission for Employment Policy.

Title V - contains miscellaneous provisions and training-related changes to other federal laws, including: amendments to the Wagner-Peyser Act altering funding to state employment service agencies and requiring joint planning between the job training and employment service delivery systems; and amendments to the Social Security Act affecting coordination between the job training delivery and the Work Incentive Program carried out by state and local welfare agencies.